# FINANCIAL TIMES

TUESDAY 6 DECEMBER 2022 | INTERNATIONAL NEWSPAPER OF THE YEAR | EUROPE

Serhii Korovayny/FT

## Briefing

▸ **Glencore to pay $180mn over DRC corruption claims**
The mining group has agreed a payout to cover claims arising from alleged corruption, in its latest settlement with global authorities over its conduct. It brings the total it has agreed to pay this year to more than $1.66bn after probes into its practices.— PAGE 6; LEX, PAGE 20

▸ **Canada challenges China**
Ottawa has said it will send more warships to the Taiwan Strait to assert that the waters claimed by China are international.— PAGE 4; GIDEON RACHMAN, PAGE 19

▸ **Central banks rates alert**
A global monetary watchdog has warned that central banks might have to backstop parts of the financial system vulnerable to rate rises.— PAGE 2; HUNT ON, PAGE 9

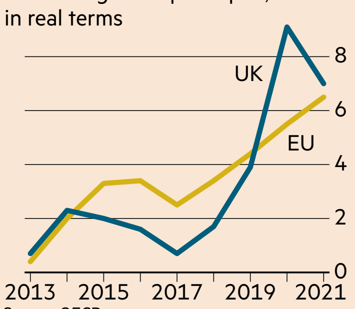
▸ **Easing signs buoy China**
More hints from Beijing that it was easing its harsh zero-Covid curbs have propelled stocks and sent the renminbi to a 12-week high against the dollar.— PAGE 10

▸ **ANC backs Ramaphosa**
The ruling party has thrown its weight behind the troubled president as he seeks to have a critical report dismissed by South Africa's highest court.— PAGE 4

▸ **Vodafone chief quits**
Nick Read has said he will step down after a turbulent year in which the share price has fallen by a fifth and investor criticism has grown.— PAGE 6; LEX, PAGE 20

## Datawatch

**Health spending**
Annual % growth per capita, in real terms




Source: OECD

The pandemic generated a spike in health spending per capita, and as a share of GDP, in the UK. The growth rate was also the largest in nearly 50 years and was driven by strong expansion in spending for PPE and Covid testing

# Oil tanker jam gathers off Turkey as launch of Russia oil cap halts sailings

• $60 a barrel limit comes into force • Ankara insists on ships' insurance • More missiles hit Ukraine

TOM WILSON AND DAVID SHEPPARD — LONDON
ROMAN OLEARCHYK — KYIV
POLINA IVANOVA — BERLIN

A traffic jam of oil tankers has built up in Turkish waters after western powers imposed a "price cap" on Russian oil and authorities in Ankara demanded insurers promise that any vessels navigating its straits were fully covered.

Under EU sanctions that came into force yesterday, tankers loading Russian crude oil are barred from acquiring western maritime insurance unless the oil is sold under the G7's price cap of $60 a barrel. The cap was introduced to keep oil flowing while still crimping Moscow's revenues.

Four oil industry executives said Turkey had demanded new proof of insurance in light of the price cap. The Turkish transport ministry did not immediately respond to a request for comment

About 19 crude oil tankers were waiting to cross Turkish waters yesterday, according to ship brokers, oil traders and satellite tracking services.

The vessels had dropped anchor near the Bosphorus and Dardanelles, the two straits linking Russia's Black Sea ports to international markets. The first tanker arrived on November 29 and has been waiting for six days, according to a ship broker who asked not to be named.

Russia has vowed to continue exporting its oil even if cut off from western insurance markets. Moscow has said it will not deal with any country abiding by the cap.

Russia launched a barrage of missiles at Ukraine yesterday in its latest attempt to cripple civilian infrastructure, as Moscow accused Kyiv of attacking two air bases deep in its territory with drones. Three people were killed and damage inflicted on the Ryazan and Engels air bases, both more than 450km from the Ukrainian border, the Russian defence ministry said.

Kyiv did not comment and Moscow gave no evidence to support its claim. If confirmed, they would mark the deepest attacks inside Russian territory since the start of the war in February.

The tankers waiting in and around Turkish waters are the first sign that the G7 price cap could disrupt global oil flows beyond Russia's exports.

Ankara has asked all crude tankers passing through the Turkish straits to provide letters from their protection and indemnity providers, known as P&I Clubs, confirming that insurance cover would remain in place to cover incidents such as oil spills and collisions.

*Additional reporting by Chris Cook, Ian Smith and Ayla Jean Yackley*


**Europe reduces gas demand** page 2
**Missiles hit Ukraine** page 3
**FT View** page 18

**Investors cast around for clues to next big disaster**

**Analysis** ▸ PAGE 9

# Crypto group Circle scraps $9bn deal to go public through Diamond's Spac

SCOTT CHIPOLINA — LONDON

**Stablecoin group Circle has ditched plans to go public in a $9bn deal through a blank cheque company chaired by former Barclays chief executive Bob Diamond, underlining how successive crises have hit the crypto sector.**

The tie-up, which was forged during the crypto bull market in July 2021 and expanded early this year, was seeking a valuation of $7.65bn to $9bn. Circle and Concord Acquisition, Diamond's US-listed special purpose acquisition vehicle, said yesterday that they had "mutually agreed" to end the merger.

The collapse of the Circle deal comes after the failure of digital asset exchange FTX, which knocked a crypto industry already under pressure from rising interest rates and a series of bankruptcies of big-name firms. Concord had until December 10 to finalise the deal to buy Circle, something that would have taken the latter public on the New York Stock Exchange.

"We are disappointed the proposed transaction timed out; however, becoming a public company remains part of Circle's core strategy to enhance trust and transparency, which has never been more important," said Jeremy Allaire, Circle chief executive. Diamond said he would "continue being an advocate for the company as it continues to grow".

Circle's USD Coin is the second-largest stablecoin on the crypto market, with a valuation of around $43bn, according to data from Circle, falling from more than $55bn in June last year after investors pulled out of the crypto market.

Stablecoins play a key role in connecting traditional and crypto markets, with most tracking the value of a major currency such as the dollar. Crypto traders use them like cash between making bets. Stablecoin operators typically earn interest on the traditional assets that underlie their tokens, with a higher supply in circulation boosting revenue.

The group said yesterday that it reported $43mn in net income in the third quarter of this year on revenue and interest income of $274mn.

Many publicly listed crypto groups come been under pressure this year. US-listed exchange Coinbase's shares tumbled about 80 per cent in 2022.

Market tumult has hit other key players in the crypto industry, including broker Genesis, which halted withdrawals from its lending scheme last month, and lending platform BlockFi, which followed FTX into bankruptcy.

**Lex** page 20


| | | | |
|---|---|---|---|
| Austria | €4.30 | Morocco | Dh50 |
| Bahrain | Din1.8 | Netherlands | €4.30 |
| Belgium | €4.30 | Norway | NKr45 |
| Croatia | Kn32/€4.25 | Oman | OR1.60 |
| Cyprus | €4.00 | Pakistan | Rupee350 |
| Czech Rep | Kc120 | Poland | Zl 24 |
| Denmark | DKr43 | Portugal | €4.00 |
| Egypt | E£80 | Russia | €5.00 |
| France | €4.30 | Serbia | NewD530 |
| Germany | €4.30 | Slovenia | €4.00 |
| Greece | €4.00 | Spain | €4.00 |
| Hungary | Ft1350 | Switzerland | SFr6.50 |
| India | Rup220 | Tunisia | Din7.50 |
| Italy | €4.00 | Turkey | TL50 |
| Luxembourg | €4.30 | UAE | Dh23 |
| Malta | €4.00 | | |



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No: 41,190 ★

Printed in London, Liverpool, Glasgow, Dublin, Frankfurt, Milan, Madrid, New York, Chicago, San Francisco, Tokyo, Hong Kong, Singapore, Seoul, Dubai


## World Markets

**STOCK MARKETS**

| | Dec 5 | Prev | %chg |
|---|---|---|---|
| S&P 500 | 4012.24 | 4071.70 | -1.46 |
| Nasdaq Composite | 11287.24 | 11461.50 | -1.52 |
| Dow Jones Ind | 34033.06 | 34429.88 | -1.15 |
| FTSEurofirst 300 | 1743.77 | 1751.99 | -0.47 |
| Euro Stoxx 50 | 3962.63 | 3977.90 | -0.38 |
| FTSE 100 | 7567.54 | 7556.23 | 0.15 |
| FTSE All-Share | 4143.21 | 4138.81 | 0.11 |
| CAC 40 | 6696.96 | 6742.25 | -0.67 |
| Xetra Dax | 14447.61 | 14529.39 | -0.56 |
| Nikkei | 27820.40 | 27777.90 | 0.15 |
| Hang Seng | 19518.29 | 18675.35 | 4.51 |
| MSCI World $ | 2733.03 | 2741.08 | -0.29 |
| MSCI EM $ | 973.85 | 978.30 | -0.46 |
| MSCI ACWI $ | 633.54 | 635.51 | -0.31 |
| FT Wilshire 2500 | 5291.39 | 5296.26 | -0.09 |
| FT Wilshire 5000 | 41322.74 | 41355.71 | -0.08 |

**CURRENCIES**

| Pair | Dec 5 | Prev | Pair | Dec 5 | Prev |
|---|---|---|---|---|---|
| $/€ | 1.053 | 1.047 | €/$ | 0.950 | 0.955 |
| $/£ | 1.222 | 1.222 | £/$ | 0.818 | 0.819 |
| £/€ | 0.862 | 0.857 | €/£ | 1.161 | 1.166 |
| ¥/$ | 136.290 | 135.475 | ¥/€ | 143.480 | 141.890 |
| ¥/£ | 166.526 | 165.496 | £ index | 79.748 | 80.039 |
| SFr/€ | 0.988 | 0.986 | SFr/£ | 1.146 | 1.150 |

**CRYPTO**

| | Dec 5 | Prev | %chg |
|---|---|---|---|
| Bitcoin ($) | 17056.20 | 17107.88 | -0.30 |
| Ethereum | 1261.15 | 1279.69 | -1.45 |

**COMMODITIES**

| | Dec 5 | Prev | %chg |
|---|---|---|---|
| Oil WTI $ | 79.04 | 79.98 | -1.18 |
| Oil Brent $ | 84.75 | 85.57 | -0.96 |
| Gold $ | 1784.75 | 1803.15 | -1.02 |

**GOVERNMENT BONDS**

| Yield (%) | Dec 5 | Prev | Chg |
|---|---|---|---|
| US 2 yr | 4.36 | 4.35 | 0.02 |
| US 10 yr | 3.58 | 3.58 | 0.00 |
| US 30 yr | 3.60 | 3.61 | -0.01 |
| UK 2 yr | 3.34 | 3.37 | -0.03 |
| UK 10 yr | 3.10 | 3.15 | -0.05 |
| UK 30 yr | 3.45 | 3.49 | -0.05 |
| JPN 2 yr | -0.02 | -0.03 | 0.01 |
| JPN 10 yr | 0.25 | 0.25 | 0.01 |
| JPN 30 yr | 1.49 | 1.49 | 0.00 |
| GER 2 yr | 2.10 | 2.09 | 0.01 |
| GER 10 yr | 1.88 | 1.85 | 0.03 |
| GER 30 yr | 1.67 | 1.68 | -0.01 |

Prices are latest for edition
Data provided by Morningstar


*A Nikkei Company*

VISIT…

Price pressures

# Central banks warned of inflation fight threat

## BIS says built-up risks could trigger bailouts amid tightening of policy

DELPHINE STRAUSS — LONDON

Central banks could be forced to backstop crucial parts of the financial system that are vulnerable to higher interest rates, undermining their attempts to fight inflation, the Bank for International Settlements warned yesterday.

The BIS, dubbed the bank for central banks, said the crisis that unfolded in UK gilt markets in September underlined the risk that monetary authorities could be forced to inject liquidity into financial markets at a time when they are trying to rein in price pressures through higher interest rates and are shrinking their balance sheets.

The BIS said in its quarterly review that other large defined benefit pension systems were less vulnerable to fire sales than those in the UK, but that similar risks had built up in many parts of the non-bank financial sector during a long period of low interest rates. Since the 2008 financial crisis, central banks have kept borrowing costs at historical lows and pumped trillions of dollars into the financial system through quantitative easing programmes. That has led investors to seek riskier returns.

"When these risks materialise and the attendant economic costs are substantial, there will be pressure on central banks to provide a backstop," the BIS said. "While justified, this can contrast with the monetary policy stance and encourage risk-taking in the longer run."

With global rates rising rapidly this year, and liquidity in the core US Treasury market "noticeably worse" than in the previous period of turmoil in March 2020, a sudden rush to deleverage could lead to market dysfunction, the BIS said.

The Bank of England has been sensitive to the charge that its gilt-buying intervention could hinder its efforts to curb inflation and delay its plans to shrink its balance sheet by selling assets accumulated under QE. The US Federal Reserve has also started to sell off assets this year, while the European Central Bank is expected to begin debating what to do with its bond stockpile next week.

Andrew Bailey, BoE governor, told the House of Lords economic affairs committee last week it had been "imperative" to end the gilt-buying intervention promptly. The operation constituted a "serious moral hazard problem", since parts of the market "would love to have the Bank of England permanently offering to buy gilts", and "was running directly counter to the operation of monetary policy".

"What we've seen in the UK is just one possible example of what might happen," said Claudio Borio, head of the BIS's monetary and economic department, who called it "unprecedented" for central banks to be tightening monetary policy to curb inflation in a context of high debt and high property prices.

The UK episode underlined the urgency of tightening regulation of the non-bank financial sector, which had "grown in leaps and bounds" since the financial crisis, and had hidden vulnerabilities that "may not stay in the non-bank sector", said Borio.

The BIS pointed to increasingly volatile agency mortgage-based securities markets as another area, as MBS played a key role in enabling credit to the US real estate sector and were often viewed as near substitutes for US Treasuries.

Annual contest

# Account of global chip battle wins FT business book prize

ANDREW HILL — LONDON

**Chris Miller has won the Financial Times Business Book of the Year Award for *Chip War*, his timely account of the global battle for semiconductor supremacy, in one of the tightest contests since the prize started in 2005.**

Miller received the £30,000 prize, presented for the year's "most compelling and enjoyable" business book, at a ceremony in London yesterday.

The judges' discussion of the shortlist of six titles ended with a close-fought battle between *Chip War* and *The Power Law*, a history of the venture capital industry by Sebastian Mallaby, a previous winner of the prize.

Roula Khalaf, editor of the FT and chair of the book award judging panel, described *Chip War* as one of the most important books she had read this year.

"The fight for semiconductors and the quest for supply chain resilience are among the biggest economic and business stories of our time and will be for much of the near future," she said.

Miller, associate professor of international history at Tufts University's Fletcher School of Law and Diplomacy, explains in the book how manufacturers came to depend on supply of advanced chips from a few companies, including Taiwan Semiconductor Manufacturing Company, based in the geopolitical hotspot off mainland China.

Recent global tensions and supply chain difficulties, exacerbated by the coronavirus pandemic, had only underlined that dependency and the timeliness of Miller's analysis, the award judges said.

At the same award ceremony, Âriel de Fauconberg received the £15,000 Bracken Bower Prize for her book proposal, *Before the Dawn*, about the pioneering work of climate technology entrepreneurs. Minouche Shafik, director of the London School of Economics, was the guest speaker.

The authors of five other titles shortlisted for the main award received £10,000. The other finalists were: *Dead in the Water*, by Matthew Campbell and Kit Chellel, about the ramifications of an apparent attack on an oil tanker; *Influence Empire*, Lulu Chen's book about Tencent, the Chinese technology company; *The Rise and Fall of the Neoliberal Order*, by Gary Gerstle, on the consequences of untrammelled free markets; Mallaby's *The Power Law*; and *Disorder*, Helen Thompson's analysis of energy geopolitics.

Nicole Perlroth's probe into the cyber weapons arms race, *This Is How They Tell Me the World Ends*, was last year's winner of the business book award.

The other judges of the 2022 award were: Mimi Alemayehou, senior vice-president for public-private partnerships at Mastercard's humanitarian and development group; Mitchell Baker, chief executive, Mozilla Corporation; Mohamed El-Erian, president, Queens' College, Cambridge, and adviser to Allianz and Gramercy; James Kondo, chair, International House of Japan; Randall Kroszner, professor of economics and deputy dean for executive programmes at University of Chicago's Booth School of Business; and Shriti Vadera, chair, Prudential and the Royal Shakespeare Company.

Europe. Affordable housing

# Greece offers cheap home loans to young buyers

## Aim is to provide mortgages for 1% to help families get on the property ladder

ELENI VARVITSIOTI — ATHENS

Hilltop view: a couple look down on the city of Athens where property prices and rents have soared
Louisa Gouliamaki/AFP/Getty Images

Katerina Giousi had given up on buying a place to call home. "It was just unthinkable," the 29-year-old hairdresser, recently married and with a 10-month-old son, said from the central Athens beauty salon where she has worked for the past six years.

Greece's seven-year housing boom has left many young people in the same position, priced out of the property market and forced to cover the cost of soaring rents despite hardly any rise in their real incomes. A surge in borrowing costs after the European Central Bank raised interest rates by 2 percentage points over three meetings has only added to the problem.

That may soon change, however, after the government unveiled a €1.75bn affordable housing package that will put home ownership within the grasp of Giousi and thousands like her by offering ultra-cheap loans to fund purchases.

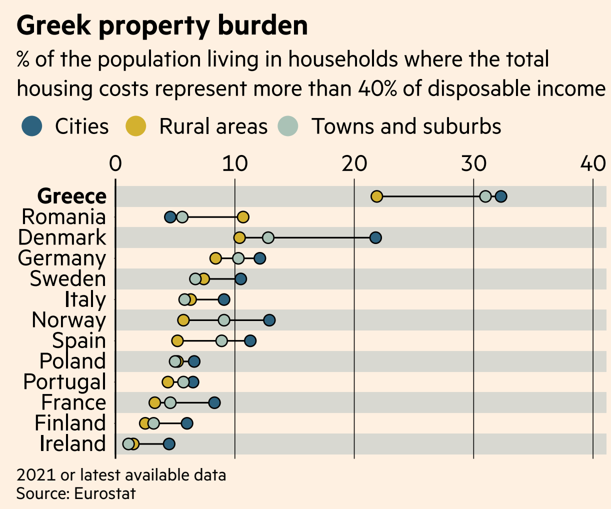
As borrowing costs soar across Europe, Greece is the latest country to offer relief to people struggling to get, or stay, on the property ladder. Madrid has unveiled measures to ease the burden on vulnerable homeowners, many of whom are tied to floating-rate mortgages, which move in line with interest rate rises. Warsaw stepped in to protect borrowers whose mortgages were made in Swiss francs, after the depreciation of the zloty. Ireland has loosened the requirements for first-time buyer loans.

The scale of the crisis facing young Greeks is so great — a poll in June by Athens-based think-tank Eteron showed 47.9 per cent of those aged 18 to 44 struggled or were unable to pay rent — that managing it has become a priority for the centre-right government of Kyriakos Mitsotakis, which faces elections next year. Starting early next year, banks will provide €500mn worth of mortgages at a quarter of the market rate to about 10,000 low-income people aged 25 to 39 by using €375mn in interest-free loans from the government. That will mean this group can borrow, initially, at least, at about 1 per cent.

"Without the cheap mortgage, it would be impossible for us," said Giousi, who is now searching near where she lives in Haidari, a west Athens suburb.

"The reality is that housing costs gnaw off your income. It wasn't that way in the past, and we needed to create different tools to cover different needs," said Akis Skertsos, minister of state and designer of the programme.

The proportion of Greeks spending more than 40 per cent of their disposable income on housing is far in excess of the EU average. However, the OECD warned recently that the package will merely lead to higher housing costs in the longer term. "Cross-country experience suggests that the new fiscal subsidy for home loan interest costs may raise house prices when new supply is constrained, with the effect of reducing access to home ownership," the Paris-based organisation said last month.




Bankers played down the concerns. "Real estate prices will hardly be distorted as the scheme is expected to apply to about 10,000," said Eurobank's chief executive, Fokion Karavias.

However, Nikos Vettas, general director at IOBE, an Athens-based economic think-tank, said that while the measures were a step in "the right direction", housing would remain unaffordable as long as salaries stayed low.

The government package also aims to fix a shortage in the supply of accommodation, using much of the remaining €1.37tn in funds to renovate old flats for students and low earners. The government is also planning to move civil servants from 177 of its offices from the centre of Athens to the suburbs over the next five years, increasing the availability of space in the city centre.

'Without the cheap mortgage, it would be impossible for us'
Katerina Giousi, below

"[The package] will not only give the opportunity to young people to become homeowners, but also provide an incentive to upgrade an ageing real estate market," said Karavias.

Skertsos said the government would double the funding if demand exceeded supply. Enabling legislation should be passed by the end of the month, while banks are expected to open applications almost immediately.

Since Greece emerged from its debt crisis, residential property prices have soared. "House prices have increased 30 per cent while rents are up 50 per cent in the past seven years," said Dimitris Melachrinos, chief executive of Spitogatos, the largest online property platform, which has more than 500,000 listings.

The rapid increase has been blamed in part on the growth of Airbnb and similar short-term rental platforms. Greek cities have far more Airbnb rentals listed as entire homes than cities such as Amsterdam and Dublin, indicating that the business is having a more drastic impact on curtailing the availability of housing to local people than elsewhere.

In Koukaki and Plaka, two areas close to the Acropolis, old buildings have been renovated and turned into boutique hotels, while former residents, among them students and young couples, have been replaced by tourists. Taxis and minivans circle the streets, waiting for visitors, while keys have been replaced by codes on the exterior doors, and luggage wheels roaming the pavements are part of the soundtrack.

"It has turned my neighbourhood into a tourist block," said Constantinos Sofikitis, a Plaka resident. "We've become the dirty backyard of the Parthenon."

Another factor pushing up prices has been the golden visa programme, which granted a five-year residence permit to third-country nationals on the condition they bought real estate worth at least €250,000. Many properties were purchased at double or even triple their market value, according to a study by Eteron. A doubling of the qualifying threshold to €500,000 from next year will add to the bubble, according to Alkis Kafetzis, a researcher at Eteron.

Germans are the leading foreign buyers, followed by Americans and British, said Melachrinos. "Greece is still relatively a cheap market compared to other European countries. Just not to Greeks."

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**Published by:** The Financial Times Limited, Bracken House, 1 Friday Street, London EC4M 9BT.
Tel: +44 20 7873 3000; Fax: +44 20 7407 5700.
Editor: Roula Khalaf.

**Germany:** Demirören Media, Hurriyet AS-Branch Germany, An der Brucke 20-22, 64546 Morfelden-Walldorf, +49 6105 327100. Responsible Editor, Roula Khalaf. Responsible for advertising content, Jon Slade.
**Italy:** Monza Stampa S.r.l., Via Michelangelo Buonarroti, 153, Monza, 20900, Milan. Tel. +39 039 28288201 Owner, The Financial Times Limited; Rappresentante e Direttore Responsabile in Italia: I.M.D.Srl-Marco Provasi - Via G. Puecher, 2 20037 Paderno Dugnano (MI), Italy. Milano n. 296 del 08/05/08 - Poste Italiane SpA-Sped. in Abb.Post.DL. 353/2003 (conv. L. 27/02/2004-n.46) art. 1 .comma 1, DCB Milano.
**Spain:** Bermont Impresion, Avenida de Alemania 12, CTC, 28821, Coslada, Madrid. Legal Deposit Number (Deposito Legal) M-32596-1995; Publishing Director, Roula Khalaf; Publishing Company, The Financial Times Limited, registered office as above. Local Representative office; C/ Infanta Maria Teresa 4, bajo 2, 28016, Madrid. ISSN 1135-8262.
**UAE:** Masar Printing & Publishing, P.O. Box 485100, Dubai. Editor in Chief: Roula Khalaf.
**France:** Publishing Director, Jonathan Slade, 46 Rue La Boetie, 75008 Paris, Tel. +33 (0)1 5376 8256; Fax: +33 (01) 5376 8253; Commission Paritaire N° 0919 C 85347; ISSN 1148-2753.
**Turkey:** Dunya Super Veb Ofset A.S. 100. Yil Mahallesi 34204, Bagcilar- Istanbul, Tel. +90 212 440 24 24.
**Sweden:** Responsible Publisher - Christer Norlander

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Energy supplies

# EU reduces gas demand by a quarter to curb Russia reliance

SHOTARO TANI — LONDON

**EU countries cut gas demand by a quarter last month even as temperatures fell, in the latest evidence that the bloc is succeeding in reducing its reliance on Russian energy since Moscow's full-scale invasion of Ukraine.**

Provisional data from commodity analytics company ICIS showed gas demand in the EU was 24 per cent below the five-year average last month, following a similar fall in October.

European countries have been trying to pare back their reliance on Russian gas and oil by finding alternative sources or changing to curb demand.

They have been helped by an unseasonably warm autumn, although in the past two weeks temperatures have dropped closer to normal levels.

In Germany and Italy, the EU's two largest gas consumers, demand fell 23 and 21 per cent respectively in November, ICIS found. In France and Spain it dropped more than a fifth and in the Netherlands by just over a third.

"Industry is proportionally driving the biggest reductions in gas consumption, and this is entirely the result of clear market pricing," said Tom Marzec-Manser, lead European gas analyst at ICIS. The high price had "disincentivised" use, he added.

In 2021, the EU imported 155bn cubic metres of natural gas from Russia, or about 45 per cent of EU gas imports and close to 40 per cent of its total gas consumption. But executives and analysts have warned that without further falls in EU demand and more LNG imports, gas shortages could persist for years.

"Demand will need to be lower than pre [Russia-Ukraine] war levels to get enough inventory" for next winter, said Alex Tuckett, head of economics at consultancy CRU Group. "The question is, how much demand reduction, and how painful it will be."

The drop in demand meant EU gas storage facilities were at 95 per cent capacity in mid-November, according to trade body Gas Infrastructure Europe.

**See The FT View and Opinion**

Inflation

# Fall in eurozone retail sales boosts case for lower rate rise

MARTIN ARNOLD — FRANKFURT

**Retail sales in the euro area suffered their biggest monthly fall of the year, raising the chances that the European Central Bank will switch to smaller rate rises next week.**

The 1.8 per cent fall in eurozone retail turnover in October, published yesterday by Eurostat, the EU statistics agency, was slightly larger than expected by economists polled by Reuters. It was the biggest drop since a 2.1 per cent decline in December 2021.

"With households facing huge energy bills and rising interest rates, we expect spending to fall further over the winter," said Andrew Kenningham, an economist at research group Capital Economics. The latest data were "consistent" with his view that the eurozone was "entering a recession", he added.

The data bolster the case of ECB policymakers calling for a smaller rate rise, after two 0.75 percentage point moves.

Gabriel Makhlouf, Irish central bank governor, said yesterday a half percentage point rise in the deposit rate to 2 per cent was "the minimum needed" to tackle inflation. France's central bank boss, François Villeroy de Galhau, said on Sunday that a 0.5 percentage point rise was "desirable". Both are seen as moderates who are usually close to the consensus view on the ECB council.

When the council meets on Thursday next week, it must weigh up the risks to growth and inflation in the region.

Inflation data last week showed price growth fell in November for the first time in 17 months, though — at 10 per cent — price pressures remain far higher than the bank's 2 per cent goal.

"Inflation is still too high for the ECB to stop hiking interest rates," said Melanie Debono, an economist at Pantheon Macroeconomics. "But along with the fall in inflation in November, the fall in retail sales is another thing ECB doves can point to when making their case for slowing the pace of rate hikes.

"We expect the majority of the council to vote for a pivot to a 50 basis point rate hike when push comes to shove."

INTERNATIONAL

# Food prices expected to remain high as conflict and adverse weather linger

## Households globally are yet to experience lower inflation despite stabilisation in international markets

EMIKO TERAZONO AND VALENTINA ROMEI — LONDON

Climate change and the war in Ukraine are set to keep food prices at far higher levels than before the pandemic, despite signs of moderation in global commodity markets, economists and agriculture experts have warned.

Wholesale food prices have stabilised over recent months, raising hopes that the surge in the retail cost of staples such as rice, bread and milk seen in the past two years would diminish in 2023.

The latest update of the food price index of internationally traded agricultural commodities, compiled by the UN Food and Agricultural Organization (FAO) on Friday, posted its eighth consecutive monthly decline, in November, since peaking in March. Last month's index showed prices were just 0.3 per cent higher than a year earlier.

However, the stabilisation in international markets is yet to translate into lower inflation for households globally.

Even if this does happen over time, costs are likely to remain well above pre-pandemic levels as the war and weather events limit producers' ability to benefit from higher prices by increasing supply.

"Normally the cure for high prices is high prices," said Carlos Mera, a senior analyst at Rabobank. "We do see weakness in demand, but production has not been very elastic."

After several years of bumper crops thanks to favourable weather conditions, grain prices firmed during the pandemic because of hoarding by consumers, companies and governments. Even before Russia's February invasion of Ukraine, which caused prices to spike because of both countries' role in producing commodities such as wheat, persistent droughts in key growing regions had pushed prices higher.

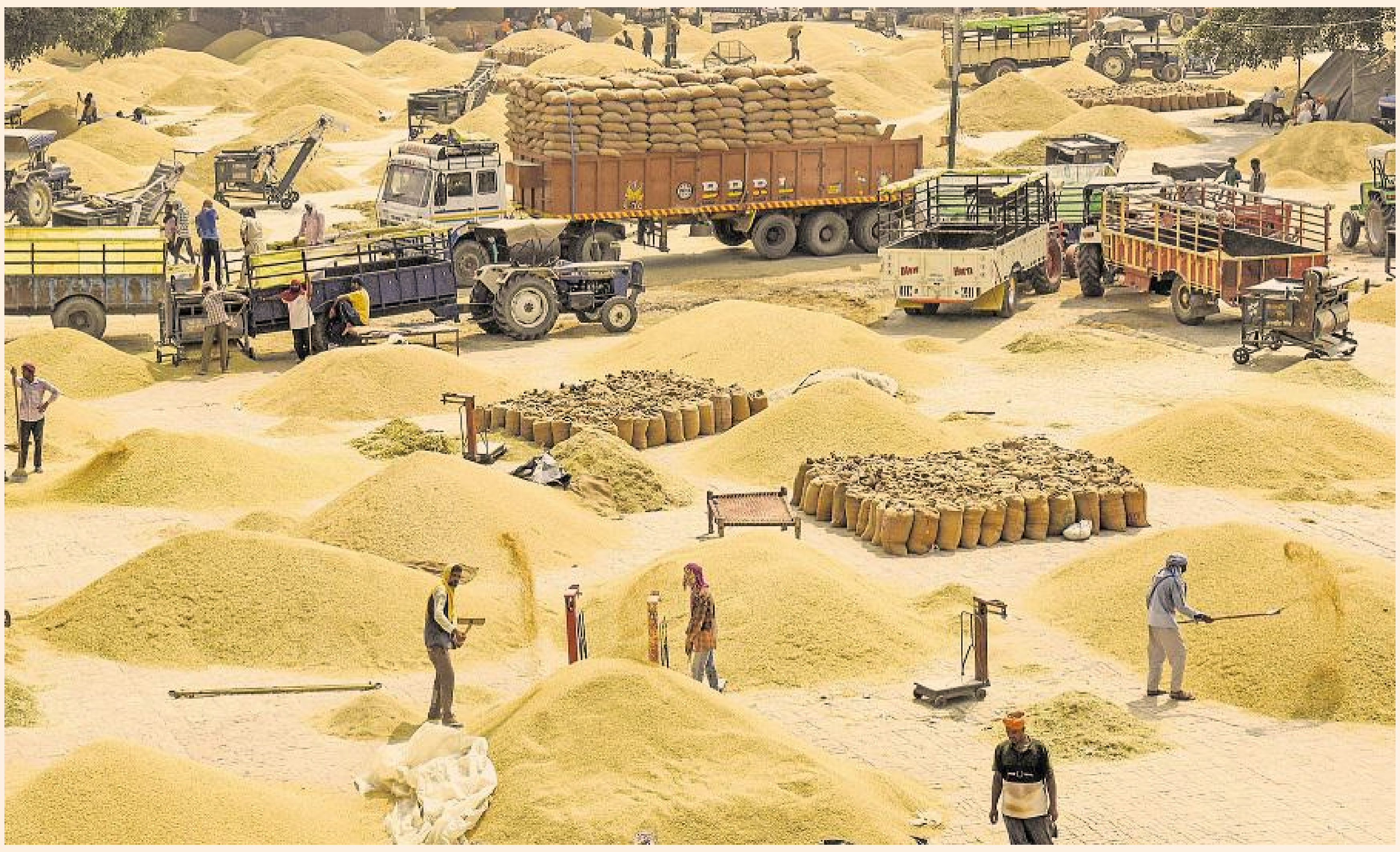
Both the Ukraine conflict, which has raised the cost of fossil fuels and energy-intensive fertiliser production, and the third year of the La Niña weather phenomenon, the cause of severe droughts in the US, Argentina and Europe, have curbed farmers' ability to raise output.

"The supply response has been slow. Farmers around the world are applying less fertiliser and in places such as Africa, this will lead to lower production," said Josef Schmidhuber, deputy director of trade and markets at the FAO, which expects grain production to be lower next year than in previous years.

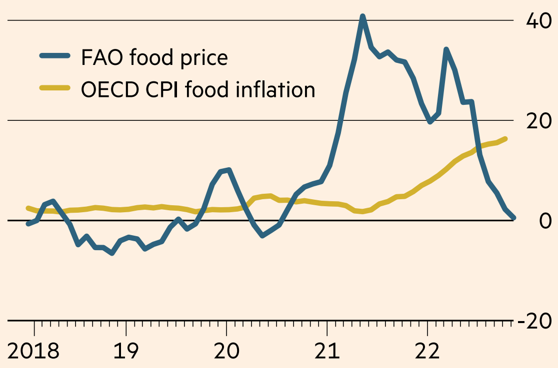
The FAO is also concerned there could be a global rice shortage next year if producers fail to find enough fertiliser.

"A fall in global cereal production for the current agricultural year, and input cost pressures, will keep food prices elevated in the near future," said Ervin Prifti, a senior economist at the IMF.

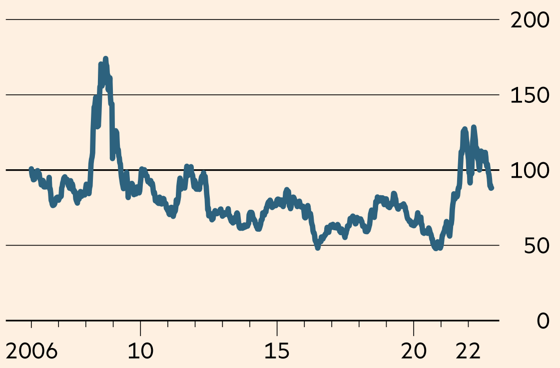
Fertiliser prices started soaring even before the war as Russia curtailed supplies of gas, the main feedstock, to Europe last year. Prices of potash jumped after western governments imposed sanctions against Belarus, one of the world's largest producers, after Minsk quashed anti-government protesters.



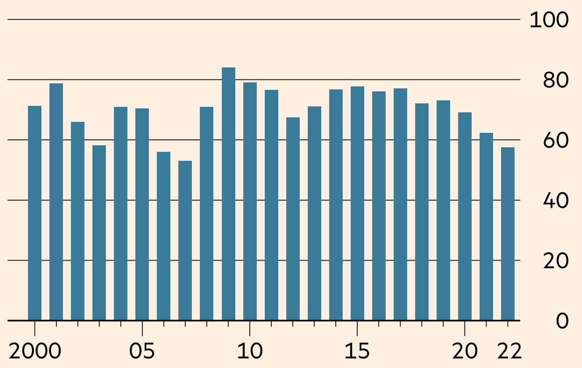
**Consumer inflation continues to be high**
Annual % change




**Fertiliser affordability remains low**
CRU fertiliser affordability index* (2006=100)




**Available global wheat inventories**
Measured in days**




Sources: Refinitiv; CRU; IFPRI
* Affordability sustained below 75 is positive to stimulate demand
** Stock to use data ex-China

**Grain market: workers in Amritsar, India. A global rice shortage next year is feared if producers fail to find enough fertiliser**
Narinder Nanu/AFP/Getty Images

Although costs have fallen from the peak, prices remain high by historical standards and data from consultancy CRU show fertiliser remains unaffordable for many.

Russia's invasion has affected three Ukrainian crop cycles so far. The 2021 harvest was prevented from leaving the country once war broke out. Key crop areas became war zones. Next year's crop yields are expected to fall sharply.

"That's equivalent to three back-to-back droughts," said Joseph Glauber, research fellow at food security think-tank IFPRI and former chief economist at the US Department of Agriculture.

The prospect of higher global wholesale food prices comes as most countries are struggling with increased consumer food price inflation. Across the G7, food costs for consumers have risen 12.7 per cent on average over the past year. Many middle income and developing countries have reported even higher numbers, from more than 40 per cent in Hungary to nearly 100 per cent in Turkey.

"It may take up to two more quarters before we see reductions in domestic food inflation," Prifti said.

Katharine Neiss, chief European economist for PGIM Fixed Income, a fund manager, said lower wholesale prices would not feed through into retail costs quickly as food production was very energy intensive, with the impact of higher oil and gas prices because of Russia's invasion of Ukraine lingering.

Consumers in emerging markets and developing economies, who typically spend a relatively large proportion of their income on food, are particularly exposed. Many countries in Africa and the Middle East are reliant on the Black Sea region for imports and tend to have weaker and more volatile currencies.

> 'It may take up to two more quarters before we see reductions in domestic food inflation'

Most global food commodity transactions are priced in dollars, potentially amplifying the effect of higher costs on domestic food prices.

Although the extension in November of the Black Sea grain deal between Russia and Ukraine, which ensures at least some of the country's food commodities reach international customers, has lowered the risk of further price spikes, geopolitical conditions remain precarious.

Meanwhile measures used by economists and traders to assess the availability of commodities, such as the stock-to-use ratio, indicate supplies of wheat at the lowest level in more than a decade.

"I don't think we're out of the woods yet," said Glauber.

Prifti agreed. "It remains uncertain how the combination of harvest disruptions, energy prices and monetary policy will play out. However, things could get worse before they get better."

Infrastructure strikes

# Missiles hit Ukraine and Russia blames Kyiv for air base attacks

ROMAN OLEARCHYK — KYIV
POLINA IVANOVA — BERLIN

**Russia launched a nationwide missile attack on Ukraine yesterday in its latest attempt to cripple civilian infrastructure, and accused Kyiv of drone attacks on two air bases deep in its territory.**

Three people were killed and there was damage to aircraft at the Ryazan and Engels air bases, both more than 450km from the Ukrainian border, the Russian defence ministry said.

Kyiv did not comment on the air bases strikes and Moscow gave no evidence to support its claim, but if confirmed they would mark the deepest attacks inside Russian territory since the start of the war in February.

The missile barrage and air base attacks on Ukraine came on the day an EU ban on seaborne Russian oil shipments took effect alongside a G7 mechanism to cap the price of Russian crude.

Yesterday's barrage against Ukraine was the latest in a months-long Russian pivot to attacks on power and water supplies, seeking to demoralise Ukrainians and, as the cold sets in, aiming to spark a fresh wave of refugees into Europe aimed at eroding western support.

Ukraine president Volodymyr Zelenskyy said in a video address to the nation that "air defence forces shot down most of the missiles" and that repairs to damaged areas were already under way. Ukraine's air force said it had intercepted more than 60 missiles out of a total of 70.

The extent of damage from the hours-long air strike was not immediately clear but affected areas included the Black Sea port of Odesa, Zelenskyy's home town of Kryvyi Rih and the Zaporizhzhia frontline region, where two people were killed by a missile, according to officials. Ukraine's air defences have been bolstered in recent weeks by supplies of modern surface-to-air weapons from its US and European allies.

Ukrenergo, the state power grid company, described yesterday's strikes in a statement as the "eighth mass missile attack by a terrorist country".

"Unfortunately, there are already hits on energy infrastructure facilities and related emergency power outages. Ukrenergo dispatchers are working to maintain balance in the power system," it added.

Police in Moldova told a local news site that missile fragments had landed in the north bordering Ukraine for a second time in recent weeks.

Russia's defence ministry said the Ukrainian drones that targeted the air bases were shot down as they flew in at low altitude and it was the resulting explosions that killed three at Ryazan and led to superficial damage of aircraft.

Earlier yesterday, videos on Russian social media channels showed a large-scale explosion in the Saratov region, and state media reported a fuel tank explosion at the Ryazan site.

**See FT Big Read: Person of the Year**

# World Cup Morocco players blur borders and win Arab hearts

SIMON KUPER — DOHA

Achraf Hakimi, Morocco's thrilling right-back who kissed his veiled mother in the stands after victory over Canada, was born and raised in the poor southern suburbs of Madrid.

Centre-back Romain Saïss, son of a French mother and Moroccan father, used to wash dishes in his dad's restaurant in the south of France.

Morocco's star, Hakim Ziyech, learned his football in a new town on reclaimed land in the Netherlands.

At this World Cup in Qatar, a country where 90 per cent of the population are migrants, all borders are blurred and the ultimate example is Morocco.

The team that face Spain in today's second-round match are the last African side in the competition. They are also the last Arab team, supported by stadiums full of fans from across the Arab world who whistle whenever Morocco's opponents have the temerity to attack.

Morocco are a western European team: 14 of their 26 players were born outside the country, the highest proportion for any team in Qatar. The Atlas Lions mix the best of Arab football with the best of the European game.

Recruiting from diasporas is a footballing tradition. *Oriundi,* South American sons of Italian émigrés, helped Italy win two World Cups in the 1930s. Ireland in the 1980s and 1990s mostly fielded Britons of Irish descent.

Morocco's population is 37mn but its football team rely disproportionately on the 4.2mn-strong diaspora. Western Europe outdoes north Africa for youth coaching, healthcare, nutrition and playing facilities.

The paucity of Morocco's football infrastructure sank its bid to host the 2026 World Cup. And so the Atlas Lions have long had émigré heroes: a former manager discovered the French-raised Moroccan Mustapha Hadji, star of the World Cup in 1998, by reading about him in France Football magazine.

In 2014, Morocco's football federation targeted the European diaspora with a campaign called "Bring back talents belonging to the soil".

Sometimes incentives were offered, writes Dutch historian Gijsbert Oonk: the federation wooed Dutch-Moroccan player Mohamed Ihattaren by paying for his father's funeral, "including the return of his body to Morocco".

But Morocco's campaign also found an emotional resonance in the diaspora.

Other African teams, such as Algeria or Senegal, have generally managed to recruit only foreign-born players who were not good enough to play for their European country, usually France. Morocco did better. Ziyech answered a call-up for the Dutch squad in 2015, then quit the camp and unexpectedly opted for Morocco. Had he chosen differently, he would surely be wearing orange in Qatar, as the playmaker the Netherlands now lack.

**Hakim Ziyech: learned to play on reclaimed land in the Netherlands**

Perhaps European racism — even Dutch-born Moroccans are still habitually called *marokkanen* — pushes some players to identify with their parents' country of origin.

Morocco's previous coach, Vahid Halilhodžić, made the bizarre gamble of fighting his best player, saying: "I don't select a player who can unbalance the group." Ziyech refused to play for him. After Halilhodžić was sacked in August, his pragmatic French-Moroccan successor, Walid Regragui, who spent his childhood summers visiting family in Morocco, immediately recalled his star.

Given a creative role at outside-right, Ziyech seems to love playing for this team.

He is a happy marriage of the north African dribbler tradition and European collectivist football: he can beat defenders, hit 40-yard crossfield passes, and strike crosses that suddenly drop dead at the back post, but he also drags his skinny body back to defend, sometimes with his tongue hanging out in exhaustion.

Morocco have made him their designated risk-taker, letting him play his natural game: he attempts a decisive action almost every time he gets the ball. At his club, Chelsea, he has to play it safe when he is picked at all.

On Morocco's right flank, Hakimi steamed forward to join Ziyech even when the team were hanging on to their 2-1 lead against Canada.

Whereas Halilhodžić prioritised dull defence, this team exudes pleasure. And when defensive organisation is required, midfielder Sofyan Amrabat, a graduate of the Netherlands' youth teams, takes charge.

Nobody cares that some players speak shaky Arabic. Morocco won two World Cup matches last week, one more than in the previous 36 years.

After they beat Belgium, there were small riots in Belgian and Dutch cities, but the vast majority of the diaspora is taking peaceful pleasure, clustering in front of their televisions from Madrid to Frankfurt, hometown of midfielder Abdelhamid Sabiri.

Today's game will be a festival of multiple belongings, with both teams potentially featuring suburban *Madrileño* right-backs: the guy who kept Hakimi out of Real Madrid's first team is Spain's Dani Carvajal.

Economic relations

# UAE and Ukraine plan trade talks amid pressure from west

SIMEON KERR — DUBAI

**The United Arab Emirates is to open trade talks with Ukraine, seeking to boost economic ties despite the Russian invasion.**

The war in Ukraine has halved bilateral trade, but officials hoped that sealing this economic partnership would more than double trade beyond prewar levels.

"We want to boost trade by eliminating trade barriers, customs, fees, standardisation, etc. This will bring huge potential for doubling of exports and imports," said Thani al-Zeyoudi, UAE minister of state for foreign trade. "This is a very conservative assessment. We hope to go beyond doubling. UAE foreign trade is growing fast, and we plan to bring our model to Ukraine."

The talks come amid western pressure on the UAE, an ally of both the US and Russia, for its neutral stance in the war. Abu Dhabi has abstained on some UN resolutions relating to the war and Dubai has become a haven for Russian money.

The UAE said it welcomed investment from any source that was not subject to UN sanctions. Financial institutions in the country said they complied with western sanctions on individuals and companies affiliated with the Kremlin.

The Gulf monarchy said the trade talks represented "another key component" in its efforts "to help reinvigorate the national economy of Ukraine".

Ukraine, an important supplier of grains to the Middle East, signed more than $3bn in trade and investment pledges during President Volodymyr Zelenskyy's visit to the UAE in February 2021. Ukraine was the second most important source for wheat for the UAE, which imports 90 per cent of its food.

UAE officials said the beginning of talks towards a "comprehensive economic partnership agreement" were rooted in longstanding plans to boost trade globally and were unrelated to politics. "This is part of our economic diversification process," said Zeyoudi. "Ukraine will be a gateway to many European nations and is a step towards penetrating the European market."

Last year, non-oil trade between the UAE and Ukraine was worth about $905mn, a 28 per cent increase on 2020.

"The UAE has earned a well-deserved reputation as a prominent international trade and logistics hub," Yulia Svyrydenko, Ukraine's first deputy prime minister and economy minister, said. "At the same time, Ukraine is known for its role as a global food security guarantor and a growing IT powerhouse. That makes our economies complementary."

INTERNATIONAL

East Asia

# Canada challenges China on Taiwan Strait

Ottawa to send more navy ships into international waters claimed by Beijing

DEMETRI SEVASTOPULO — WASHINGTON

Canada plans to sail more warships through the Taiwan Strait to affirm the waters claimed by China are international, after Ottawa released an Indo-Pacific strategy that described Beijing as an "increasingly disruptive" power.

"We need to make sure that the question of the Taiwan Strait is clear and that it remains an international strait," Canadian foreign minister Mélanie Joly said in an interview.

"We will continue to enforce the international rules-based order when it comes to the Taiwan Strait. And that's why also we had a frigate going through the Taiwan Strait this summer, along with the Americans, [and] we're looking to have more frigates going through it."

Chinese officials earlier this year told their US counterparts China did not recognise the strait as international waters.

Speaking from Bucharest, where she was attending a Nato foreign ministers' meeting, Joly said Canada was "committing to new military assets" in the Indo-Pacific to help ensure peace and stability there.

She was speaking just after Canada released its first strategy for the region, which called for a "once-in-a-generation shift".

The Nato ministers in Bucharest held wide-ranging talks on China, as the US urges the alliance to pay more attention to the ramifications of possible Chinese military action against Taiwan.

Joly said Canada was investing C$400mn (US $298mn) in military support for the Indo-Pacific. She said Ottawa would increase the number of frigates deployed in the region by one to three warships. In addition to sending more diplomats to the area, she said Canada would post more military attachés across the Indo-Pacific.

Joly was speaking just after the Pentagon released an annual report on the Chinese military, which projected that China would have 1,500 nuclear warheads by the middle of the next decade, up from roughly 400 now. Asked how concerned Canada was about China's rapid nuclear expansion, she said it was "taking note, definitely", adding: "We know we have to do more to play a role in the security of the region."

She said Canada would also invest more in the Five Eyes intelligence-sharing network that connects the US, UK, Canada, Australia and New Zealand. "We have to make sure we have better intelligence capacity across the region . . . We are a Pacific nation, we need to make sure we play a bigger role.

"Since this part of the world is so important for us, we need to be a reliable partner because for too long we weren't." And so now "we're putting our money where our mouth is".

She declined to provide details about a recent announcement that Canada and Japan would negotiate an intelligence-sharing agreement.

While Canada's new strategy takes a hard stance on China — on its repression of Uyghurs to its crackdown on democracy in Hong Kong — Joly said Ottawa believed in engaging with Beijing. Canada would "challenge" China when necessary but "co-operate when we must" on issues such as nuclear non-proliferation, climate change and global health.

**Gideon Rachman** see Opinion

Middle East. Foreign policy

# Xi steps on US toes with Saudi trip

Region is traditionally viewed by Washington as falling under its sphere of influence

SAMER AL-ATRUSH — RIYADH
MAIQI DING — BEIJING
EDWARD WHITE — SEOUL
JAMES KYNGE — LONDON

President Xi Jinping will this week pay his first visit to Saudi Arabia in six years in efforts to boost China's relations with the Gulf region, five months after the US warned Beijing that it would not cede the Middle East to it or anyone else.

Xi will meet King Salman bin Abdulaziz al-Saud and Crown Prince Mohammed bin Salman, the kingdom's day-to-day ruler in Riyadh, and attend two summits with Arab and Gulf leaders. Neither side has given details about the Chinese leader's meeting with the Saudi royals, but the two countries could sign a deal on co-operation ranging from free trade to nuclear power.

The Chinese president's visit, which comes as he faces mounting pressure at home over opposition to his zero-Covid strategy, underscores China's desire to boost links in a region that is traditionally seen by Washington as falling under its sphere of influence.

US president Joe Biden's message to the assembled Arab leaders when he visited Riyadh in July was: "We will not walk away and leave a vacuum to be filled by China, Russia, or Iran . . . the US is not going anywhere."

Yet relations between Biden and Crown Prince Mohammed are tense. Despite the president's pledge to stick around, the view in the Gulf is that the US has grown distant and that China is among the keenest to fill any gap.

"Everyone thinks the US is on the way out," said Gedaliah Afterman, a China and Middle East expert at the Abba Eban Institute for Diplomacy and Foreign Relations in Israel. In the Washington-Beijing strategic battle, "every 10 metres [China] manages to move the Saudis in their direction is not only a win, it's a double win, because they're moving away from the US," he added.

Gulf officials make clear their wariness of getting too caught up in any China-US disputes, in the knowledge they must maintain relations with the pair.

Both Saudi Arabia and the United Arab Emirates count on Washington as a supplier of military hardware and protection. The US hardware would be almost impossible to replace with what China has to offer.

**Red carpet: Xi Jinping greets King Salman bin Abdulaziz al-Saud in Beijing in March 2017** Lintao Zhang/Getty Images

Yet that has not stopped Saudi Arabia and other Gulf nations from moving closer to Beijing on co-operation in trade, technology, and even ballistic missile technology and armed drones.

Nissa Felton, senior manager at Janes IntelTrak, a consultancy, said that while China was not presently a threat to the US's historical role as regional security provider, "increasing political ties, whether at the top of government, exercised through votes in international organisations like the UN or pursuing joint strategic initiatives . . . is potentially problematic for US long-term interests".

"This broader co-operation, the willingness to sync China's foreign policy with their own domestic agendas, signals an openness to diversify away from these countries' traditional relationships with the US."

At home, Xi faces widespread angst over a severe economic downturn and rising opposition to his policies, which erupted in protests late last month across several big cities. "Xi Jinping needs to divert attention because of domestic dissatisfaction," said Willy Lam, an expert in Chinese politics at the Chinese University of Hong Kong.

Saudi Arabia tops the list of destinations for announced Chinese foreign investment in the Gulf region over the past 20 years, totalling $106.5bn, ahead of Kuwait with $97.6bn and $46bn for the UAE, according to Janes IntelTrak.

Saudi Arabia is China's largest supplier of crude and China is the kingdom's largest trading partner.

Oil will loom large over this week's visit, which takes place after an important Opec+ meeting, the imposition of a European embargo on Russian crude and the planned introduction of a price cap on Russian oil.

'Xi Jinping needs to divert attention because of domestic [woes]'

But China's relationship with the kingdom, and other Gulf countries, has gone beyond oil in recent years, particularly in technology.

That co-operation, particularly on Huawei 5G technology, concerns the US administration, as does the prospect of allowing China security facilities in the Gulf. The UAE last year shut down a purported Chinese military facility in the country after US objections.

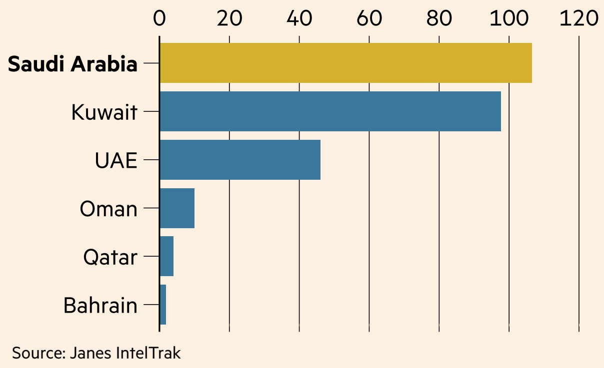
The US has agreed with Saudi Arabia to work on 5G technology, but the kingdom is still pursuing its co-operation with Huawei. US hackles have also been raised by speculation Saudi Arabia could sign a deal to settle oil trades in renminbi.

Saudi government officials have privately briefed that any such deal would not include oil trades, which are conducted in dollars, but extend to other sectors. A senior Saudi official said he was unaware of any trade deal in renminbi that would be agreed this week.

But he said there would be nothing wrong with doing so. "It's the largest trading partner of Saudi Arabia."

**Saudi Arabia is at the heart of China's burgeoning Gulf region relationship**

Foreign investment by China entities in Gulf Cooperation Council (announced since 2002, $bn)




Source: Janes IntelTrak

South Africa

# Ramaphosa receives ANC backing amid pressure to resign

JOSEPH COTTERILL — JOHANNESBURG

**South Africa's ruling African National Congress has thrown its weight behind besieged president Cyril Ramaphosa, as he asked the country's highest court to dismiss a damning report accusing him of abuse of power.**

The backing from the ANC, a day ahead of a key parliamentary vote, secures Ramaphosa's position as president. The president had been under pressure to resign over a panel's findings that he may have broken the law over a theft at his private game reserve.

In papers filed yesterday, Ramaphosa called on the constitutional court to dismiss the report. He also sought an order from the court to declare as "unlawful and invalid" any further steps taken by parliament over the report, one day before lawmakers are due to vote on whether to accept the findings and start full-scale impeachment proceedings.

The ANC said yesterday it would instruct its MPs to vote against an impeachment investigation in parliament, after a meeting of its most senior members. The backing signals that Ramaphosa is for now secure as head of the party, which holds leadership elections next week.

'It [ANC parliamentary support] means the president continues as president'

"It means the president continues as president," said Paul Mashatile, ANC treasurer-general. Ramaphosa did not submit his resignation nor was he asked to resign, he added.

Ramaphosa has been widely tipped to win re-election as ANC leader in next week's vote, which takes place five years after he defeated Jacob Zuma in a party power struggle and set about cleaning up government after South Africa's worst post-apartheid corruption scandal.

But Ramaphosa's grip on power was shaken last week when the panel led by a former chief justice concluded that he may have committed serious misconduct over the fallout from the 2020 theft of $580,000 in cash which was stuffed in a sofa at his Phala Phala farm.

Ramaphosa failed to properly report the incident to police and to fully account for the source of the cash, of which there might have been more than was stolen, the panel said.

Ramaphosa has denied wrongdoing over Phala Phala and has said that the cash legitimately came from the sale of buffalo to a Sudanese businessman.

His allies have said that the panel report has serious flaws, relying on weak evidence and an incorrect interpretation of the law.

The panel began its investigation after Arthur Fraser, a former chief of South Africa's state security agency and an ally of Zuma, earlier this year revealed the theft and accused the president of a cover-up.

South Africa's central bank and public protector, a government ombudsman, are also investigating the source of Phala Phala cash and the circumstances of the theft. Ramaphosa would still be expected to subject himself to these processes, Mashatile said.

Contracts & Tenders

Cupru Min SA Company based in Abrud, 1st Petru Dobra Square, Alba county, Romania, tel.+40258-780083, fax.+40258-780296, e-mail: office@cuprumin.ro , organizes an open tender for sale of dry copper concentrate. Quantity to be sold is 42,000 tons. Contract period: 12 months. Deadline for offer submission: 18.01.2023, at 13:00. Deadline for the reception of clarification request regarding the contents of the assignment documents is 15.12.2022. Deadline for the transmission of the answers to clarification requests is 5 working days since the request reception. The offers will be submitted in Romanian language, with a validity of at least 90 days since the opening. The offers will be opened on 18.01.2023 at 14:00, at company's head-office. The assignment criteria is the most advantageous economic offer.

The tender documentation, in Romanian or English, on hard copy or electronic format can be obtained for free, from company's headquarters – sales department, based on a written demand containing all the identification, tax and contact data of the applicant. The documentation can be picked up personally, by authorized courier or it can be sent by e-mail.

Legal Notices

EXPRESSION OF INTEREST

We are looking for buyers for our 4.534% shareholding in Company A, a company registered in Thailand. The main business of Company A is to produce and import coke, and sale of electric power, coke and alcohol.

Interested parties are invited to express their interest in writing to Ms Christine Lin (Email: christine.lin@fookontan.com) of Foo Kon Tan LLP for further details by the close of business on 20 December 2022.

UN study

# Papua New Guinea population report leaves PM in the dark

NIC FILDES — SYDNEY

**Papua New Guinea's prime minister says he does not know the exact size of his country's population after a report suggested that the number of people living in the Pacific nation could be almost twice the official figure.**

A new study compiled by the UN Population Fund has implied that Papua New Guinea's population may have ballooned to 17mn compared with the official figure of 9.4mn, according to a report in The Australian newspaper.

James Marape, who was re-elected as Papua New Guinean prime minister in August, told the newspaper he believed that the population could be 11mn but admitted he might be wrong.

The lack of clarity around the size of the country's population has serious implications for its economic status and raises doubts over its ability to provide services to its people.

If the study, which has not been published, is correct then it would almost halve the country's gross domestic per capita levels from about 4,000 kina ($1,136), according to Maholopa Laveil, a fellow at the Lowy Institute think-tank and an economics lecturer.

Marape has promised to raise the standard of living in Papua New Guinea but said that the confusion over the country's exact population highlighted the struggles the country faced.

"Whether it is 17mn, or 13mn or 10mn, the fact remains that my country's formal economy is so small, job availability is so small, the resource envelope is so small, I cannot adequately educate, provide health cover, build infrastructures and create the enabling law and order environment [that the country needs]," he said.

Jeffrey Wall, a former adviser to the Papua New Guinea government, said that while the 17mn estimate looked high, the population puzzle for the country was "alarming".

**Drama: Papua New Guinea's population may have almost doubled** — Betsy Joles/Getty

"I suspect half [the citizens] are under 25 and almost zero get employment," he said. "[It's] a time bomb."

Wall added that the lack of clarity posed a challenge for Australia, the biggest donor in the region, as it raised questions over whether its aid programmes were effective.

Laveil was also sceptical that the population could have doubled. He said there were few signs supporting that sort of population growth, such as a rise in illegal migration to Indonesia and the Solomon Islands, or a collapse in the education and hospital systems. However, he emphasised that the country desperately needed a new census.

Most of Papua New Guinea's 96 districts are rural, which makes accurate population modelling by satellite methods very difficult.

The UN Population Fund did not immediately respond to questions over the report.

# Why haven't more boards got a net zero transition plan?

They think it's too difficult ☐

They think it's too difficult ☐

They think it's too difficult ☐

Chapter Zero

No matter how hard it might seem, now is the time for business leaders to transform net zero ambitions into robust plans and measurable action. As a chair or non-executive director, membership of Chapter Zero will support you in encouraging and challenging your company's plans for the transition to a net zero economy. With access to our lively peer-to-peer network, relevant climate tools and expertise, you'll have everything you need to make the task easier. Join us at chapterzero.org.uk

**#PlansBeyondPledges**

Chapter Zero is part of a global network – the Climate Governance Initiative, a project in collaboration with the World Economic Forum – operating in 50+ countries. We are supported by the Centre for Climate Engagement, Hughes Hall, University of Cambridge.

**Westward shift** India's stock market hits all-time high as Beijing's zero-Covid stance sees multinationals look elsewhere ➔ MARKETS

# Companies & Markets

## Glencore to pay DR Congo $180mn over graft claims

- Deal takes total settlements to $1.7bn
- Mining group in compliance overhaul

LESLIE HOOK — LONDON

Glencore has agreed to pay $180mn to the Democratic Republic of Congo to cover claims arising from alleged acts of corruption, marking the mining group's latest settlement with global authorities over its conduct.

The settlement means Glencore this year has agreed to pay more than $1.66bn to authorities following investigations into its practices.

Glencore, one of the largest commodity trading and mining companies, said it had undertaken a compliance overhaul so that the practices identified by the investigations no longer took place.

The Swiss-based group is the biggest western company operating in DRC, which is Africa's largest copper producer and the source of half of cobalt.

> 'The true victims of sector corruption are the citizens. Many of them live in extreme poverty'

Yesterday's deal with the DRC covers any past and future claims arising from Glencore and its affiliates' alleged misconduct in the DRC between 2007 and 2018.

"Glencore is a longstanding investor in the DRC and is pleased to have reached this agreement to address the consequences of its past conduct," Kalidas Madhavpeddi, chair, said.

Glencore's assets in the DRC include a 75 per cent stake in KCC, a large copper-cobalt project, and ownership of the Mutanda copper-cobalt mine.

Glencore pleaded guilty in May to bribery and manipulation after a coordinated probe by US, UK and Brazilian authorities. It agreed a settlement of more than $1.1bn in the US where it accepted a legal monitor, who is expected to start work shortly. It agreed to pay $40mn to Brazil authorities and a £276mn fine in the UK.

The US investigation found evidence of bribery by Glencore in the DRC and six other countries.

Glencore's share price has been little affected by the various corruption investigations, with the size of the fines dwarfed by bumper profits this year.

During the first half of this year, Glencore reported record profits of $18.9bn, largely because of high coal prices and market volatility following the Russian invasion of Ukraine. The company will hold its annual investor update today.

Other investigations into Glencore's conduct are continuing in the Netherlands and Switzerland, where authorities opened a criminal probe into allegations that the company failed to prevent corruption in the DRC.

The deal with the DRC could help shield Glencore from future international probes related to its operations in the country, according to Elisabeth Caesens, director at NGO Resource Matters. "If continuing Swiss and Dutch investigations confirm that Congo's losses are much larger than $180mn, the Democratic Republic of Congo won't be able to turn against Glencore to compensate the real amount of damages it suffered," she said.

Roger Vutsoro, DRC country manager from the US-based Natural Resource Governance Institute, said the $180mn fine was a "positive step" but questioned why parliament had not been involved in negotiating the Glencore settlement.

"The true victims of mining sector corruption are Congolese citizens. Many of them live in extreme poverty," he said, pointing out that years of systemic corruption had robbed the country of funds for development.

**See Lex**

## Covid chaos Foxconn revenues fall 29% after lockdown protests at Chinese iPhone factory

**Precautions: a staff member disinfects equipment at the Foxconn plant in Zhengzhou** — VCG via Getty Images

KATHRIN HILLE — TAIPEI

**Revenues at Foxconn fell sharply in November, in the latest signal of the damaging impact of its chaotic handling of a Covid-19 outbreak at the world's largest iPhone plant.**

Foxconn reported NT$551bn ($18bn) in revenue last month, down 29 per cent from October and 11 per cent from a year earlier. It is the first time in 12 years that the company has announced a month-on-month fall in November, a time of high production to meet Christmas sales.

It did not mention the iPhone but said the drop in smart consumer electronics products — which includes smartphones — was because of "a portion of shipments being impacted by the epidemic in Zhengzhou", where a coronavirus outbreak in Foxconn's largest plant has led to weeks of disruption and a revolt by workers.

"At present, the overall epidemic situation has been brought under control, with November being the most affected period," Foxconn said. "In addition to reallocating production capacity of different factories, we have also started to recruit new employees and are gradually moving towards the direction of restoring production capacity to normal."

A person close to the company said its internal goal was to return to "completely normal operations" after the new year at the factory in the Chinese city of Zhengzhou. It has been hit by two waves of staff walkouts and violent unrest in recent weeks. Foxconn declined to comment on the target.

The disruption at the plant, until recently the only factory to assemble the iPhone 14 Pro and Pro Max, the newest premium models, triggered a rare warning from Apple last month that shipments would be affected.

The fallout from the plant disruption drove down the iPhone's market share in China to 20.1 per cent last week, compared with 27.5 per cent during the same calendar week last year, according to analysts at investment bank Jefferies.

They estimate iPhone sales to consumers were down 46 per cent annually and 35 per cent sequentially in China last week.

"We believe the deterioration is mainly driven by supply constraints, as Foxconn's facility in Zhengzhou has been impacted by Covid outbreak," the analysts wrote.

November is the tail-end of the preholiday high season for smartphone assembly. The company's guidance that this was the month when operations were worst affected by the plant disruption was therefore "not all that meaningful", said the person close to the company. "The pressure is gradually easing now, also because we are moving into the season where we need fewer people."

## Read agrees to exit Vodafone after investors grow restless

ANNA GROSS, HARRIET AGNEW AND SARAH PROVAN — LONDON

**Nick Read will step down as Vodafone chief executive at the end of this month following a turbulent year in which the company's share price has tumbled and management has come under fire from investors.**

Read, who has led the telecoms group since 2018, will be replaced on an interim basis by Margherita Della Valle, Vodafone's chief financial officer, while it seeks a successor.

His exit comes less than a month after Vodafone cut its full-year profit forecast, pinning the blame on a weak German market. Germany accounts for about 30 per cent of group revenue.

Read has struggled to convince investors of his ability to improve the group's performance and increase its share price. The stock has fallen about a fifth this year, compared with a 2 per cent gain in the FTSE 100. Vodafone shares closed down 0.1 per cent yesterday. Rival BT's shares have fallen almost 30 per cent since the start of the year.

"I agreed with the board that now is the right moment to hand over to a new leader who can build on Vodafone's strengths and capture the significant opportunities ahead," Read said.

The company added that Della Valle would continue in her role as CFO while she runs Vodafone in the interim. Read, who has been at the group for more than two decades, will remain as an adviser to the board until the end of March.

Vodafone said Read's departure was a mutual decision. Read will receive his base salary of £1.1mn for the full financial year to March 2023, as well as a bonus, which came in at £1.5mn last year. From April to December 2023, he will receive his monthly salary as usual even though he will no longer be chief executive, given that his notice period for leaving the role is 12 months.

Read received a total remuneration package of £4.2mn in 2022, and an average of £3.8mn over the past three years.

Vodafone will pay up to £50,000 for Read to use a headhunter to find a new role and up to £7,000 in any legal fees.

Analysts at Berenberg warned that the new chief would face a tough task. "One of the reasons why we are surprised by today's news is that it's not clear what any new CEO would really do differently to Mr Read, other than risk a 'fire sale' of assets," they said.

**See Lex**


### Contracts & Tenders

**NOTICE OF INTERNATIONAL BIDDING**
**PROCESS SABESP CSS 03.930/22**

Provision of Depositary Bank Services for American Depositary Receipts (ADRs) traded on the New York Stock Exchange - NYSE. The Public Notice will be available for download as of December 06, 2022 at www.sabesp.com.br - menu "Fornecedores" - by registering a password and signing (this is required for participation) at "Licitações Eletrônicas - Cadastro de Fornecedores". Proposals shall be submitted from 00:00 on January 19, 2023 to 09:30 on January 20, 2023 at www.sabesp.com.br - menu "Fornecedores" - "Licitações Eletrônicas. The Public Session will begin at 9:30 am on the same date. São Paulo, December 6, 2022 - THE EXECUTIVE BOARD.

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**(formerly known as REC Power Distribution Company Ltd.)**

GLOBAL INVITATION (Through e-bidding Only)

**FOR SELECTION OF SOLAR POWER DEVELOPER(s) FOR SETTING UP OF 500 MW ISTS-CONNECTED SOLAR PV POWER PROJECT(s) IN INDIA THROUGH TARIFF-BASED COMPETITIVE BIDDING (TBCB) PROCESS ON BUILD OWN OPERATE (B-O-O) BASIS UNDER SCHEME FOR FLEXIBILITY IN GENERATION SCHEDULING OF THERMAL/HYDRO POWER STATIONS THROUGH BUNDLING WITH RENEWABLE ENERGY AND STORAGE POWER**

REC Power Development and Consultancy Limited (formerly known as REC Power Distribution Company Limited), New Delhi, India (a wholly owned subsidiary of REC Limited, a Maharatna company under the administrative control of the Ministry of Power) invites proposal for setting up of the above-mentioned solar power project through TBCB process on Build, Own, Operate (B-O-O) basis following single stage two envelope process of "Request for Selection (RfS)". Interested bidder may refer to the Request for Selection (RfS) notification and RfS document available on websites **www.recpdcl.in**, **www.recindia.nic.in** and **https://www.bharat-electronictender.com** w.e.f. 01.12.2022.

The bidders may obtain the RfS documents on all working days between 1030 hours (IST) to 1600 hours (IST) from 01.12.2022 up to bid submission due date on payment of non-refundable document fee of Rs. 29,500/-(Rupees Twenty-Nine Thousand and Five Hundred Only) or equivalent USD prevailing on date of purchase of documents (including GST), as per details provided in the RfS document available on the websites **www.recpdcl.in, www.recindia.nic.in** and **https://www.bharat-electronictender.com.**

The Request for Selection (RfS) Documents can also be downloaded from websites **www.recpdcl.in, www.recindia.nic.in, https://www.bharat-electronictender. com.** Interested parties can submit Response to RfS only on submission of non-refundable bid processing fee as mentioned in RfS document. The timelines related to bid submission and opening is given hereunder:

| | |
|---|---|
| Online Bid Submission end date & time | 23.12.2022 up to 18:00Hrs (IST) |
| Bid Submission end date & time ( Hard Copy) | 27.12.2022 up to 18:00 Hrs (IST) |
| Bid Opening date & time | 28.12.2022 at 12:00 Hrs (IST) |

Response to RfS will be opened in presence of bidders' representatives who wish to attend. The clarifications to RfS documents shall be issued to those bidders, who have obtained/purchased RfS document by paying requisite fee.

All corrigenda, addenda, amendments, time extensions, etc. to the RfS will be hosted on our websites www.recpdcl.in, www.recindia.nic.in and https://www.bharat-electronictender.com. Bidders should regularly visit our websites to keep themselves updated.

**Note:** RECPDCL reserves the right to cancel or modify the process without assigning any reason and without any liability. This is not an offer.

**Chief Executive Officer**
**REC Power Development and Consultancy Ltd.**
**(formerly known as REC Power Distribution Company Ltd.)**
**Core-4, SCOPE Complex, 7, Lodhi Road, New Delhi-110003, India**

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## Bulb's rescue by Octopus evokes memories of HBOS-Lloyds

INSIDE BUSINESS
ENERGY

Patrick Jenkins

On Wednesday September 17 2008, when Eric Daniels, then chief executive of Lloyds bank, conquered his nerves, looked past the collapse of Lehman Brothers two days earlier and agreed to buy HBOS for £12bn, he saved the giant mortgage lender from nationalisation.

Is something similar happening now in the UK energy market?

Dozens of suppliers have already failed, not least because the regulator — echoing lax banking supervision 14 years ago — allowed them to disregard basic safety and soundness measures, such as hedging wholesale energy prices. But the biggest company failure is ongoing. Today, Bulb looks a lot like HBOS in 2008; and Octopus, its putative rescuer, looks a lot like Lloyds.

The omens are hardly propitious. Within a few weeks of striking that September 2008 deal, Lloyds had itself been forced into a humbling government bailout ultimately worth £20.3bn.

It took a further eight-and-a-half years for the government to sell off its 43 per cent stake, roughly making its money back (if you exclude the state's cost of borrowing, inflation and fees). Along the way, HBOS caused Lloyds years of pain, most notably with the early-2009 disclosure of an £11bn loss thanks mainly to vast bad debts in its corporate loan book.

In other respects, though, Octopus, and the government, may have grounds for optimism.

Lloyds today is Britain's dominant high street bank with a quarter-share of the market, having secured an exceptional waiver from competition rules when it did the HBOS deal. Octopus, post-Bulb, will command a market share of close to 20 per cent.

At the same time, the government is ensuring that Bulb's 1.5mn customers benefit from undisturbed service, thanks to the Special Administration Regime under which its failure has been managed, and the energy transfer scheme that will move them to Octopus.

So in orchestrating the rescue, has the government learnt the lessons of Lloyds-HBOS?

In some ways, clearly yes. The SAR, explicitly dreamt up for key sectors in the wake of the 2008 financial crisis, seems to have worked effectively and has given the government time to find a commercial buyer for Bulb.

> Managers reckon that as long as Octopus can hedge out the risk in Bulb's operations, any surprises should be manageable

By doing so, it has avoided having to inject state equity capital into Bulb, instead supporting it with lending. Of course, this was the original plan for Lloyds-HBOS, and it unravelled fast (largely because of regulatory capital requirements). But managers reckon that as long as Octopus can swiftly hedge out the risk in Bulb's operations, any surprises, given the limited complexity of the business, should be manageable.

Octopus may even prove a healthier buyer for Bulb than Lloyds was for HBOS. It is not a legacy operator, but a fast-growing new one. While that may give it less solid foundations, it does have the merit of being less bogged down with old technology and working practices. It reckons its operations are between £50 and £100 per customer a year more efficient than rivals.

But one aspect of the Bulb deal, when compared with the HBOS rescue, is far from welcome: the details of the government's financial support for Bulb are shrouded in mystery. No one seems able to explain the projected £6.5bn cost, which appeared in Office for Budget Responsibility documents recently: at the last count in March the projected number was just £2.2bn and so far just £1.14bn has been spent. Analysts assume a large chunk of the rest is a worst-case estimate of upcoming wholesale energy purchase costs which could spike as Bulb's supplies are not hedged.

The government has said it will "provide financial support" to the entity through the winter. That support would be repaid "in accordance with an agreed repayment schedule", including a "profit-share agreement". Those involved suggest this may take three to five years.

When the banking rescues of 2008 were undertaken, the UK was part of the EU and the financial implications were promptly disclosed. Strict state-aid rules meant Lloyds was subject to a penalty in the form of the enforced sale of its TSB subsidiary, representing a near-5 per cent market share and 600-plus branches. It seems unlikely that, post-Brexit, any equivalent penalty would be applied to Octopus. But as rival energy suppliers have argued in a judicial review process, there is no excuse for obscurity. The details of Bulb's rescue should be fully transparent, and bodies such as the public accounts committee and the National Audit Office should waste no time insisting on that.

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Airlines

# KLM urges travellers to take the train

## Chief encourages use of rail for shorter journeys to help reach green targets

ROBERT WRIGHT AND PEGGY HOLLINGER
LONDON

The boss of KLM has encouraged people to take the train rather than fly on short-haul journeys, in order to help cut carbon emissions, saying the airline sector should stop viewing rail as a competitor.

"If [you] have a good alternative, you should really use it," Marjan Rintel said. "If you're serious on reaching your sustainability goals, the train is not a competitor. We need to work together."

She said that she used the train when she travelled from Amsterdam, where KLM is based, to the Paris headquarters of parent company Air France-KLM.

Air France, the French carrier that comes under the same holding company as KLM, stopped flying domestic routes where there are rail or coach alternatives taking under two and a half hours in 2020, as part of measures agreed with Paris in exchange for aid during the Covid-19 pandemic.

The ban on short-term flights was later passed into law, a measure approved by the EU last week. In effect, however, the changes only affect three routes from Paris, with connecting flights for instance exempted. In June, the Dutch government announced plans to slash flights from Schiphol by more than 10 per cent to 440,000 a year.

The move is set to lead to a sharp cut in short-haul flights from the airport and could put a brake on KLM's growth.

> 'The train is not a competitor. We need to work together'
> Marjan Rintel, KLM chief

Rintel said that KLM had block-booked seats on the train service linking Amsterdam to Brussels and Paris, and she had urged the business "to develop the relationships with the Dutch railways, to see what we can do at short notice to motivate our customers to go by train to Brussels or Paris".

KLM was looking at making it easier to buy flight and rail tickets in a single booking and was talking to rail groups in the Netherlands and France about making transfers easier, Rintel said.

Baggage services could be integrated, letting customers drop off luggage at an airport and collect it at the end of a railway journey.

"As a customer you always look at the final destination . . . so you must offer a product like this."

Rintel worked for six years for Nederlandse Spoorwegen, the state-owned train operator, and was chief executive of the group for nearly two years.

She expressed no interest in running train services, and said that the airline would work with NS and the Eurostar Group, owner of the cross-Channel Eurostar service and of the Thalys service linking France, Belgium, Germany and the Netherlands.

Rintel took over as chief amid strained relations between KLM and its parent. Varying performances at the airlines had caused tensions as group chief Ben Smith sought closer co-operation. The strains culminated in the Dutch government's decision to take a 14 per cent stake in Air France-KLM in 2019 to protect KLM's interests.

Financials. Withdrawals

# 'Gates' weigh heavy on Blackstone's prized Breit

## Redemptions surged on falling Asian property markets and rising interest rates

ANTOINE GARA AND SUJEET INDAP
NEW YORK
KAYE WIGGINS — LONDON

**Redemptions have sent shockwaves through Blackstone's Manhattan headquarters**
Andrew Kelly/Reuters

In July Blackstone's chief executive recounted a surprise meeting with an investor in the firm's $69bn-in-assets private real estate vehicle designed for wealthy individuals.

The investor had approached Stephen Schwarzman to tell him that the Blackstone Real Estate Income Trust, or Breit, was his largest position. "I love you people. This is so amazing. All of my friends are losing a fortune in the market and I'm still making money," recounted Schwarzman of the meeting on a quarterly earnings call.

In fact, investors were pulling money from Breit at the time, alarming close watchers of Blackstone. They withdrew more than 2 per cent of its net assets that month, according to sources familiar with the matter and securities filings, exceeding a threshold at which Blackstone can limit investor withdrawals.

Asian investors had been pulling cash in the spring and summer as property markets in the region plunged. Some carried high personal leverage and were hit with margin calls, said people familiar with the matter. Breit, the value of which has risen this year, could be sold at high prices to meet the cash calls.

As the selling moved beyond Asia, Schwarzman and Jonathan Gray, Blackstone's president, each added more than $100mn to their investments in Breit this summer, said a source. Blackstone declined to comment.

Blackstone chose to not place any limits on investors hoping to pull money in July. Though it told its investors the product is only semi-liquid, a limit could have sparked fears they could not get their money out easily. But a growing tide of redemption requests forced Breit to announce on Thursday it would raise "gates" — allowing the fund manager to limit the volume of assets redeemed — through the end of the year.

The move caused shockwaves, damaging what has become the biggest engine of asset and fee growth at the world's largest alternative asset manager. On Thursday, Blackstone shares fell more than 7 per cent and a host of analysts downgraded their outlook on fears the decision could stall its growth.

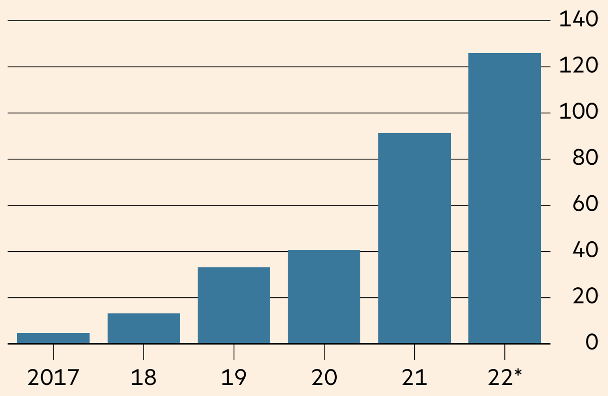
"The Breit outflow bear case is playing out," said Michael Brown, an analyst at Keefe, Bruyette & Woods. "[We] expect it to remain an overhang on shares in the coming quarters."

Blackstone created Breit in 2017 as a way for wealthy investors to gain access to its acclaimed real estate investment platform. Unlike its traditional funds designed for institutional investors such as pensions that came with 10-year lives, Breit was designed as a "perpetual" fund with no expiration. Interested investors could buy in at the fund's net asset value and Blackstone would charge a 1.25 per cent annual management fee and a 12.5 per cent performance fee on its annual profits above a 5 per cent hurdle.

Blackstone hired hundreds of staff to sell Breit and made the fund broadly available to wealth advisers. It even created "Blackstone University," an online portal where the advisers could be indoctrinated on the fund's merits.

It pitched Breit as offering wealthy individuals the same ability as large institutions to diversify away from public markets and receive healthy dividends. But to do so they would have to accept giving up some liquidity rights.

**Breit assets**
$bn




* Figure to Sep 30
Source: Blackstone securities filings

The fund allows for 2 per cent of total assets to be redeemed by clients each month, with a maximum of 5 per cent allowed in a calendar quarter.

Breit became a roaring success, drawing in tens of billions of dollars in assets. Blackstone invested the money mostly in logistics and multifamily US residential real estate, where it correctly predicted that supply shortages would propel rising rental income. The portfolio now stands at $125bn in gross assets, which includes leverage Blackstone has used to purchase property.

In 2021, Blackstone launched Bcred, a similar product designed for debt-based investments. Peers such as KKR, Starwood and Brookfield have launched funds to replicate Blackstone's success as they also prioritise winning wealthy individual investors as clients.

"I do have a little bit of non-traded . . . Reit envy," said Marc Rowan, Apollo's chief executive, last year referring to Blackstone. "This has just been amazing. Kudos to the firms that have really . . . shown us how much money is out there."

Breit represents about 10 per cent of Blackstone's fee-paying assets under management and about a fifth of overall fee-related earnings, according to analysts at Barclays. Since the fund is ostensibly perpetual in nature, analysts have ascribed multiples as high as 30-times fee revenues to its assets.

As about $100bn poured into Breit and Bcred in recent years, Blackstone's market value at times eclipsed that of Goldman Sachs.

> 'I do have a little bit of non-traded Reit envy. This has just been amazing'
> Marc Rowan, chief executive, Apollo

This year has been more challenging, as rising interest rates and falling publicly listed property stocks scare some investors. Over 70 per cent of redemptions from Breit have come from Asia, where property markets have plunged.

Breit's success also made it vulnerable to redemptions. The fund has delivered a 9.3 per cent return this year, while US listed real estate trusts have declined about 20 per cent. Since the fund repurchases redemption requests at their most recent quarter's net asset value, it became a rare asset investors looking to raise cash could sell at annual highs.

US investors began submitting requests to trim parts of their holdings this fall. Some realised gains on Breit and offset the taxes with losses on other assets, sources said. Now that Blackstone has limited withdrawals, investor demand to pull money may intensify.

"Our view is that the greatest rate of growth is behind Breit," said William Katz of Credit Suisse. The redemptions called into question the true value of Breit to Blackstone and would diminish the ability of the firm and its peers to raise money from wealthy investors.

"The ultimate question has to be asked about the efficacy of these products if clients only want to get their cash out," he said, questioning just how perpetual such capital is.

The rush for the exits has come before Breit reported any hit from rising interest rates, a slowing economy or falling property valuations. Critics of the way private vehicles are valued note that the fund has gained this year while more volatile public markets have fallen sharply. Blackstone says its valuations emphasise the underlying performance of its properties and not quickly shifting investor sentiment and they have accounted for higher interest rates.

On Thursday, Blackstone announced the $1.27bn sale of a minority interest in two Las Vegas casinos owned by Breit, which sources aid could be used to support the fund's liquidity. Breit made about twice its money on the investments over three years and has sold $5bn in assets this year above their carrying values, said the sources. Breit is considering other asset sales, but insists it will not be a forced seller.

Some advisers believe the limitation on redemptions will stave off any risks of fire sales, but they are advising clients to pause on committing to Breit.

"The gates are one of the features of the investment that actually protects investors," said Andy Kapyrin, chief investment officer of RegentAtlantic, a registered investment adviser with $6bn in assets under management.

"I don't think the liquidity risks are so big they should book a capital gain to get out. For investors that aren't in, we are recommending a cautious approach."

Blackstone said: "Breit has delivered extraordinary returns to investors since inception nearly 6 years ago and is well positioned for the future."

Automobiles

# Toyota steps up electric vehicle push in Europe

PETER CAMPBELL — BRUSSELS

**Toyota will launch six electric models in Europe by 2026 and start UK trials converting pick-up trucks to run on hydrogen, as it lays out plans to meet tough emissions rules this decade.**

The group has been a leader in lowering carbon dioxide emissions because of its early use of hybrid technology, but is rolling out battery-only vehicles as Europe prepares to phase out sales of any new petrol or diesel models by 2035.

It will release five new vehicles following its debut model, the bZ4X, before 2026, though it does not expect to begin manufacturing electric vehicles in Europe until later in the decade as sales will not at first justify the investment.

Toyota expects 10 per cent of its sales in the region to be battery electric cars by 2025, rising to about 80 per cent by 2030.

"Environmentally friendly cars can only contribute to the environment if they're popularised," said Toyota's European president Matthew Harrison. "And from that viewpoint, our range of hybrid and plug-in hybrid cars have an important role to play."

Its plans include assembling batteries for its new plug-in hybrid C-HR car in Europe and running a trial in the UK to retrofit its Hilux pick-ups to run on hydrogen.

The project will be run at its Burnaston plant in Derbyshire, which makes the Toyota Corolla.

> The plans include assembling batteries for the new plug-in hybrid C-HR car in Europe

Despite rivals including Stellantis and Ford pledging to sell only zero-emission vehicles by 2030 in the region, Toyota wants to keep sales of hybrid and hydrogen vehicles an option. It argues that not every country will be able to accommodate electric vehicles because of either electricity networks or affordability.

"More than 1bn people do not have access to adequate electricity supplies due to a lack of infrastructure," said Toyota chief executive Akio Toyoda. While electric cars were "a satisfactory answer in Europe and increasingly in the Unites States . . . they are not yet an answer everywhere, nor are they yet affordable for all".

In Europe, the carmaker will be forced to sell electric cars much earlier in some markets or risk fines. The UK, where Toyota has two production plants, is attempting to push carmakers harder by introducing China-style sales mandates from 2024. Under proposed rules, 22 per cent of a brand's sales must be zero emission vehicles in 2024, rising to 100 per cent by 2030.

The UK has not yet ruled on how it will treat hybrids in its calculations, and particularly Toyota's, which use engines and batteries at the same time.

Harrison said the mandate was helpful in incentivising the charging industry to invest by guaranteeing a certain sales level, which he said would spur the spending needed to grow the network.

"I think it's quite a smart thing for the government to put the gun to the head of the infrastructure companies and say, 'You know what the volume is guaranteed to be, therefore get on with putting in this infrastructure.'"

The car industry has been in a standoff with charging providers, saying motorists are put off from buying electric vehicles because of the lack of charging points.

Harrison said forcing carmakers to sell certain quotas of pure electric models before 2025 was "punishing" businesses that favoured hybrids instead of pursuing electric vehicles.

Technology

# TikTok outshines rivals to double ad revenue

ARJUN NEIL ALIM

**TikTok doubled its advertising revenue in 2022, hitting US rivals Meta and Snap, with the Chinese group the only big social media platform to significantly increase sales, according to a report published yesterday.**

The figures, from GroupM, WPP's media buying agency, came as separate data from Magna, part of IPG Mediabrands, revealed the chill gripping the wider online advertising market.

Magna found that spend on social media increased 4 per cent this year, down from 36 per cent in 2021. The agency said it expected social media spending to climb 7 per cent next year.

"A more competitive environment and data headwinds have dramatically slowed the amount of new money flowing into social media this year," said Luke Stillman, a senior vice-president at Magna. "Looking forward, consumers have gravitated towards short vertical video formals and advertisers are focusing on those."

Magna's forecast revised down growth in total spending on traditional and digital advertising by 1.5 percentage points to 5 per cent for 2023, significantly lower than the 7 per cent growth rate in 2022.

GroupM also revised its 2023 forecast for total ad spending growth down 0.5 percentage points to 5.9 per cent.

One bright spot in the global advertising market was US political spending during the midterm elections, which almost doubled to $13.6bn compared with 2018, the previous midterms year, according to GroupM.

Two other events that boosted advertising globally this year were the Beijing Winter Olympics and the Fifa World Cup in Qatar.

A significant drag on advertising growth this year came from the Chinese economy, which economists at Nomura estimated will grow at just 4 per cent next year.

Oil & gas

# Trafigura seals $3bn Berlin-backed loan deal

DAVID SHEPPARD

**Commodity trading house Trafigura has signed a $3bn loan facility partly backstopped by the German government to help supply natural gas to Sefe, the quasi-nationalised entity that was formerly Gazprom Germania.**

The $3bn facility will last for four years and was led by Deutsche Bank and another arranger that has asked not to be identified, and syndicated among more than 25 other banks, the company said.

The loan deal illustrates the latest move by commodity traders to try to help Germany secure commodities following Russia's invasion of Ukraine.

Trafigura will supply Sefe, which rebranded as Securing Energy For Europe after being effectively nationalised by Germany, with natural gas largely from existing supplies, trading pipeline gas and utilising its global portfolio of LNG supply deals.

The loan is backstopped by the German government's Untied Financial Loan programme, which is designed to help secure strategic commodities for Germany through the Export Credit Agency's Euler Hermes Aktiengesellschaft scheme.

The scheme has existed for years but has become more prominent following Russia's invasion of Ukraine, which left Germany scrambling to replace natural gas supplies after Gazprom slashed exports to the EU.

"The loan will support a new commitment by Trafigura to deliver substantial volumes of gas into the European gas grid, and ultimately into Germany, over the next four years," the company said.

Trafigura said the first delivery under the new loan had already taken place on November 1.

Richard Holtum, head of gas and power trading at Trafigura, said under the agreement the company would provide a "significant volume of gas to Germany backed by our extensive portfolio and long-term US LNG contracts".

# Hunt is on for the next markets fracture

## Investors are keeping a close eye on areas ranging from US Treasuries illiquidity to Japanese government debt

FT REPORTERS

After a decade of falling interest rates and central bank largesse, financial markets are facing a reckoning. Soaring inflation is being met by rising rates, the slowing of central bank asset purchases, and fiscal shocks, which are sucking out liquidity — the ability to transact without dramatically moving prices.

Violent, sudden price moves in one market can provoke a vicious loop of margin calls and forced sales of other assets, with unpredictable results. "The market is so illiquid and so erratic and so volatile," Elaine Stokes, a portfolio manager at Loomis Sayles, said. "It's trading on every impulse, and we can't keep doing that."

Policymakers are paying close attention to market plumbing and financial stability risks, with the vice-chair of the Federal Reserve recently warning that a "shock could lead to the amplification of vulnerabilities".

Disparate shocks such as the closure of the nickel market in London, structured product blow-ups, the bailout of European energy providers, or the UK pensions crisis, are being scrutinised as oracles of wider dislocations.

With risks rising, investors are watching some bits of the market more closely than others. *Eric Platt*

FT montage/Bloomberg/Dreamstime

### European repo strain

A rapid shift to higher interest rates is fuelling dysfunction in Europe's money markets, threatening to undermine efforts to tighten monetary policy.

The legacy of large-scale asset purchases, known as quantitative easing, in the eurozone and the UK is a flood of liquidity in the form of central bank reserves that were created to buy government bonds. Those bonds were hoovered up by the European Central Bank and the Bank of England, leaving relatively few available to investors.

That scarcity of safe short-term debt may be hurting the euro area's €10tn repo market, the International Capital Market Association, which represents bond market participants, has warned.

The little-followed market serves as a vital lubricant in daily trading, as it allows investors to take out a short-term cash loan against the assets they hold.

> 'So erratic and so volatile. It's trading on every impulse, and we can't keep doing that'

ICMA said the shortage was distorting interest rates for prized collateral such as short-term government debt and pushing it well below the ECB's deposit rate, which hit 1.5 per cent last month, having risen above zero in September for the first time in more than a decade.

A similar dynamic has gripped UK markets, where, at the start of November, an index of overnight repo markets fell below the Bank of England's policy rate by a record amount, according to analysts at ING. These distortions typically worsen at quarter- and year-end.

ICMA urged the ECB to set up a reverse repo facility similar to that introduced by the Federal Reserve in 2013. That would allow the central bank to ease the collateral squeeze by loaning out some of the bonds it holds from its asset purchasing programmes. The call came despite a move by Germany's debt agency in October to address the scarcity problem by creating more government debt securities that it can lend out in repo markets.

"Central banks are effectively conducting a bit of an unprecedented experiment by hiking rates when liquidity in the system is at such high levels," said Antoine Bouvet, a rates strategist at ING. *Tommy Stubbington*

### Treasuries liquidity disruption

Liquidity has long been the hallmark of the US Treasury market. But it has dried up as the Federal Reserve has raised interest rates and as major holders of Treasury debt such as the Fed and the Bank of Japan have stepped back.

The disruption in liquidity has led some investors to question the market's overall health. Any crisis in the Treasury market would have far-reaching consequences, because Treasury yields determine everything from mortgage rates to the cost for the US government to borrow. It is the backbone of the financial system and the benchmark for all other US assets, so large swings in price would ricochet across markets.

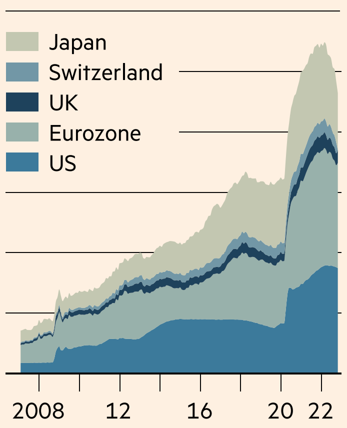
On top of the uncertainty and volatility this year that has made Treasuries harder to trade, wary investors say the liquidity issues are the result of longstanding structural issues. Some have always existed but have been accentuated as the Treasury market has grown. Some have emerged as regulations following the financial crisis have made it more expensive to hold Treasury debt.

Since then, those banks, traditional providers of liquidity, have retreated. It means that in the event of a crisis, structural problems may exacerbate any sell-off, as was seen in March 2020.

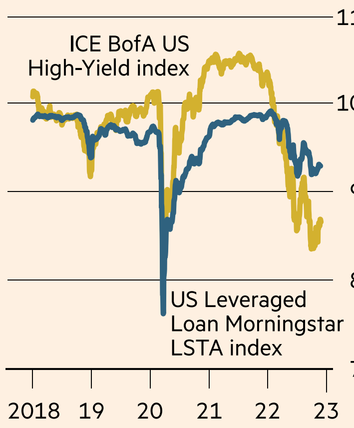
But the liquidity issues in the Treasury market also mean it may not take an event as disruptive as the onset of a pandemic to spark a big sell-off.

If some mis-step prompted a dash for cash, investors could have trouble selling Treasuries, leading to huge swings in prices, producing big enough gaps in prices to lead to forced selling. *Kate Duguid*

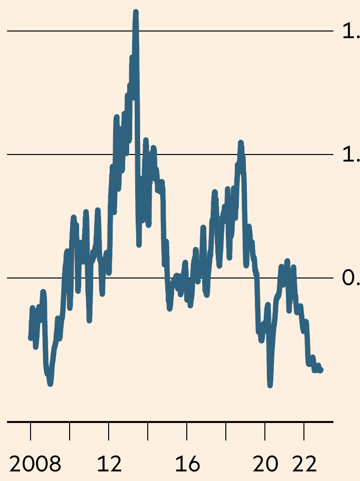
**Central bank balance sheets**
$tn




**High-yield US corporate bonds and loans**
Average trading price (cents per dollar)

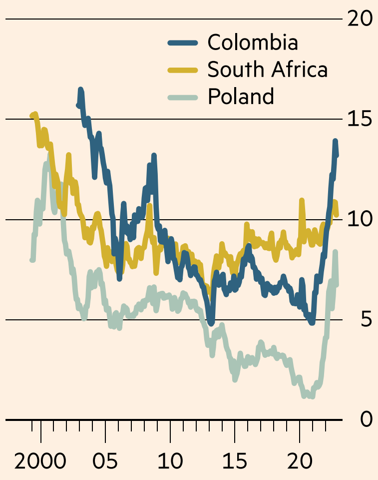



**Treasury liquidity**
Market depth, one-month moving average ($bn)




JPMorgan metric of depth in 2-, 5-, 10- and 30-year Treasuries, converted to 10-year equivalents

**Some emerging market borrowing costs have surged**
10-year local currency government bond yields (%)




Sources: Refinitiv; Ice Data Services; Morningstar; LSTA; JPMorgan

### Tokyo debt dysfunction

For several months now, as the BoJ has been forced to work ever harder to hold interest rates on the benchmark 10-year bond close to zero under its "yield curve control" policy, speculation has risen over whether markets will force the central bank's governor, Haruhiko Kuroda, to back down and loosen the policy.

Japanese rates analysts and BoJ watchers tend to think he will not; foreign funds and traders believe he might.

Logically, say analysts, the BoJ will be exceptionally cautious about an exit from yield curve control, because of the potential for a disorderly exit to send out shockwaves.

High in the memory of Japanese central bankers is the 2015 experience of the Swiss National Bank, which suddenly lifted its ceiling on the franc, which had a large effect on markets.

Switzerland, compared with Japan, is small and the disruption that would be caused by a similar capitulation would be great. Domestic stocks would plunge, with the ripple effect from a Japanese equity crash turning global funds into forced sellers.

Deutsche Bank economist Kentaro Koyama noted that in the minutes of the BoJ's September monetary policy meeting, one board member had spoken up about the increasing dysfunction of the bond markets.

"We consider it an important step towards a recognition among board members of the flailing functionality of the markets," said Koyama. *Leo Lewis*

### Stuck in credit

For years, corporate bond investors warned of the dangers of exchange-traded funds in a crisis, raising concerns over how the vehicles would cope with large redemptions in a sell-off.

But now, as the size of both the private credit and leveraged loan markets has exploded over the past few years, ETFs are seen as less of a menace.

Instead, focus has shifted to mutual funds and other vehicles that have been vacuuming up the surge of risky debt.

The Fed and IMF have rung the alarm bell over the issue. In a worst-case scenario, a fund suffering large outflows as bond or loan prices fall will have to halt redemptions, trapping capital and potentially leading to an unwinding of the fund. Investors nervous about a potential issue will probably head for the exit early, making things worse for those who wait behind.

The fact that spillovers were seen in high-grade parts of the US credit market when pension funds in the UK were hit with margin calls has intensified concerns, given that so many investors have piled into illiquid bonds and loans.

The rise of private credit has opened the door to new issues, with policymakers and regulators warning they have little insight into the cottage industry. The debts are traded far less frequently — if at all — and are not marked consistently by creditors. Even with the debt sitting in funds that require longer capital commitments, it is unclear how endowments and pensions might try to sell their stakes in a crisis. The secondary market is still nascent, albeit growing.

"We will see a breakdown in private markets," Stokes at Loomis Sayles said. "Every pension and endowment has shifted into [them]." *Eric Platt*

### Emerging market defaults

Two risks threaten financial stability for emerging market investors.

The immediate fear is of multiple defaults among low and middle-income countries as high interest rates and the strong dollar make it harder to service dollar debts. Credit rating agencies say 26 developing countries, about a third of those with sovereign eurobonds, are at substantial risk of default, extremely speculative, or in default.

Even so, the exposure of investors is less concerning. The 15 countries with bonds trading at distressed levels in October made up just 6.7 per cent of the benchmark JPMorgan EMBI sovereign eurobond index.

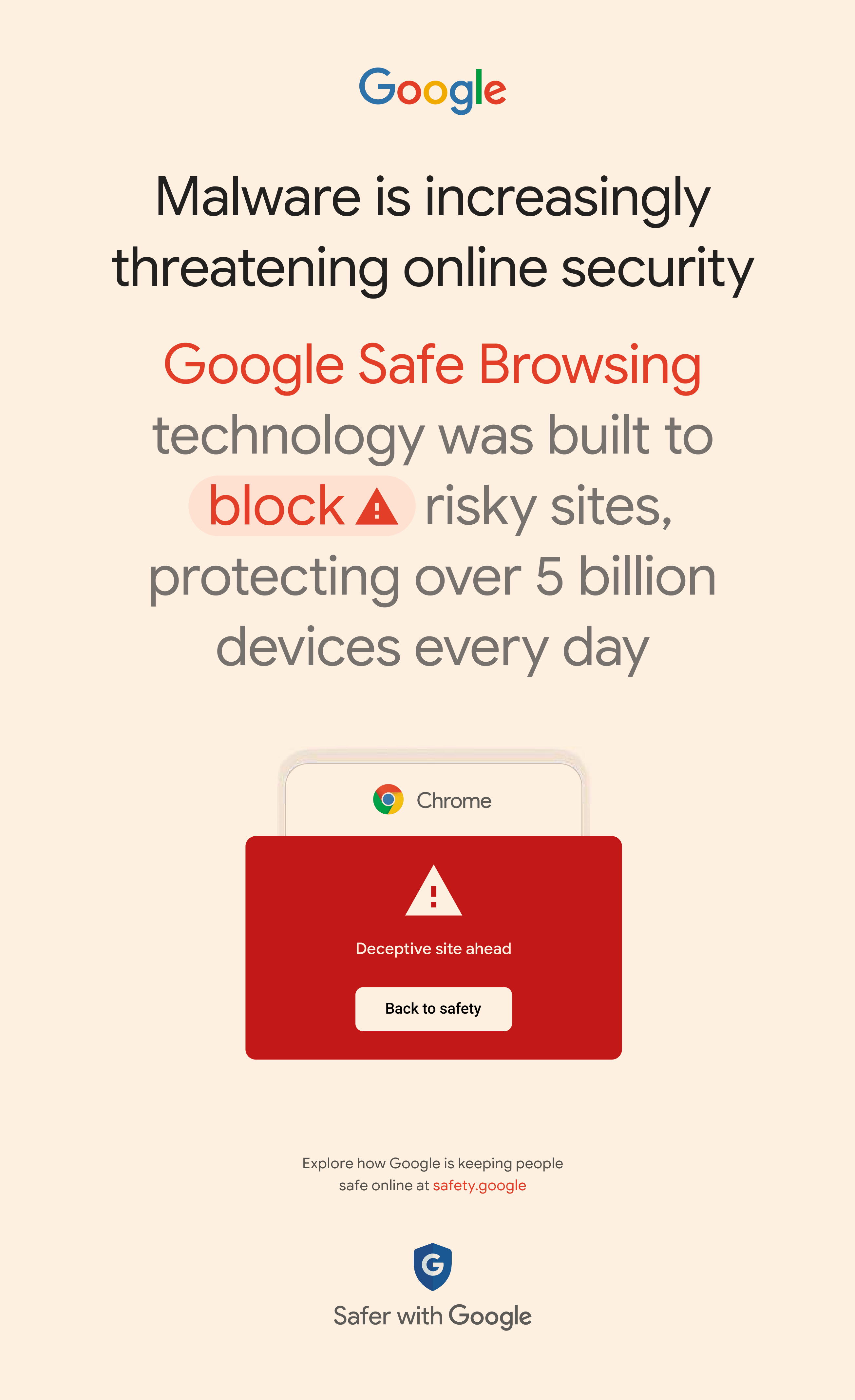
But investors have become unwilling to fund governments of some larger emerging economies. Yields on the domestic 10-year bonds of Poland, Colombia and South Africa recently hit 20-year highs. They and other issuers are being hit by soaring inflation or big fiscal imbalances or both. Investors worry that economies will not grow quickly enough for governments to stop debt ratios rising out of control.

> 'An unprecedented experiment – hiking rates when liquidity is at such high levels'

Poland's yields peaked at 9 per cent in October. Its ratio of government debt to gross domestic product is about 55 per cent. That looks unproblematic next to Brazil, where yields are 12 per cent and government debt to GDP is close to 90 per cent. Yet Brazil's yields have been broadly stable for the past 15 years.

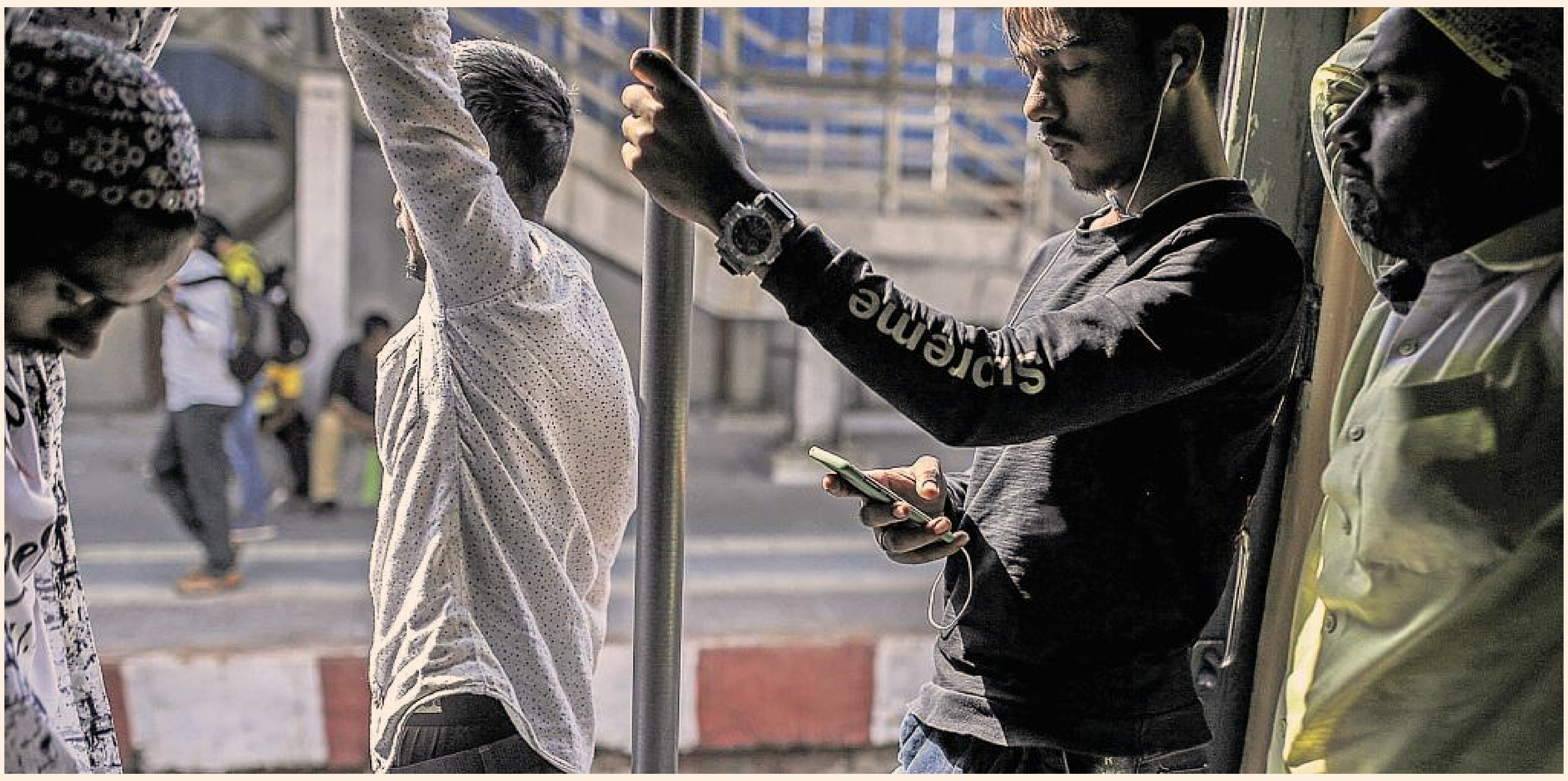
Investors are shunning Poland because its debt is of short maturity, four years on average. But nerves about the landing point of inflation and interest rates, assuming they fall from their current highs, could quickly spread.

"There is no magic threshold at which [such debts] become problematic," said Manik Narain, emerging market strategist at UBS. "But they force austerity on governments and can lead to capital flight." *Jonathan Wheatley*



Equities. Financial shift

# Indian stocks hit record high as investors look beyond China



**Conviction call: the number of smartphone users in India will reach 732mn this year, more than double the 300mn of 2017**
Dhiraj Singh/Bloomberg

## Supply chain disruptions due to Beijing's tough pandemic policies raise country's appeal

CHRIS FLOOD

India's stock market reached an all-time high this month as robust economic growth, financial reforms and a pro-business government have drawn greater interest from global fund managers.

The Nifty 50 is up 7 per cent this year compared with MSCI's broad index tracking emerging market stocks in local currency, which is down 16 per cent.

The equity benchmark's new peak at the start of this month comes as multinational companies increasingly turn to India as an alternative to China for international expansion and to gain access to a fast expanding group of middle income consumers.

Supply chain disruptions in China due to Beijing's strict zero-Covid policy have boosted India's appeal to global businesses.

Apple, for example, warned last month that shipments of its new iPhone 14 would be lower than anticipated as China's Covid restrictions interrupted its primary assembly facility in Zhengzhou.

The company is expected to shift 5 per cent of its iPhone 14 production to India this year and a quarter of all iPhones could be made in India as early as 2025, according to JPMorgan.

The shift away from China is happening across a range of sectors.

"Companies involved in electronics assembly, textiles, engineering, chemicals and pharmaceuticals sectors are moving some of their production from China to India," said Zafar Ahmadullah, who runs a concentrated India strategy with around 20 holdings at Theleme Partners, a London-based private investment partnership.

India is currently on track to become the world's third-largest economy by the end of the decade.

Real GDP is forecast to increase by an average of 6 per cent a year, faster than any other major economy, according to the consultancy Capital Economics.

Meanwhile, the rapid adoption of smartphones in India alongside a government-backed digital payments network are accelerating the country's shift towards a cashless society, a trend that was accelerated by the pandemic.

The number of smartphone users in India will reach 732mn this year, more than double the 300mn registered in 2017, according to Newzoo, the data provider.

Active internet users are expected to rise from 692mn in 2021 to 900mn by 2025, according to the internet and Mobile Association of India.

"The impact of smartphones on people's lives is profound," said Kevin Carter, a specialist emerging market investor, who has designed an India internet and ecommerce ETF, known as INQQ, to tap into the country's technology ecosystem.

The number of individual users of the government-backed Unified Payments Interface is expected to triple in five years to 750mn while merchant users could double to 100mn, according to India's central bank.

At the same time, Indian businesses such as the information technology groups Infosys and Tata Consultancy Services have developed into significant global players, encouraging other domestic companies into overseas markets.

Bajaj Auto, a Pune-based manufacturer of motorbikes and three wheelers, is developing new electric scooters and expanding into Indonesia and Africa.

In healthcare, Glen Finegan, lead portfolio manager at Skerryvore Asset Management, said increasing demand for products and services among India's growing middle class will help Cipla and Syngene to develop into global pharmaceutical companies.

"There is plenty of interesting innovation across India's pharmaceutical industry where there is a huge pool of researchers working but it is essential to find trustworthy partners," said Finegan.

Trading on a 12-month forward price-earnings multiple of 21 times, India ranks as the second most highly valued equity market worldwide behind New Zealand, according to Société Générale.

The French bank expects India's stock market to deliver earnings per share growth of 13.2 per cent this year, rising to 19.6 per cent in 2023.

High company valuations have prompted some position trimming, however, with net withdrawals by foreign institutional investors climbing to $17.9bn so far this year, compared with the inflows of $3.8bn registered over the whole of 2021, according to data from CLSA, the brokerage.

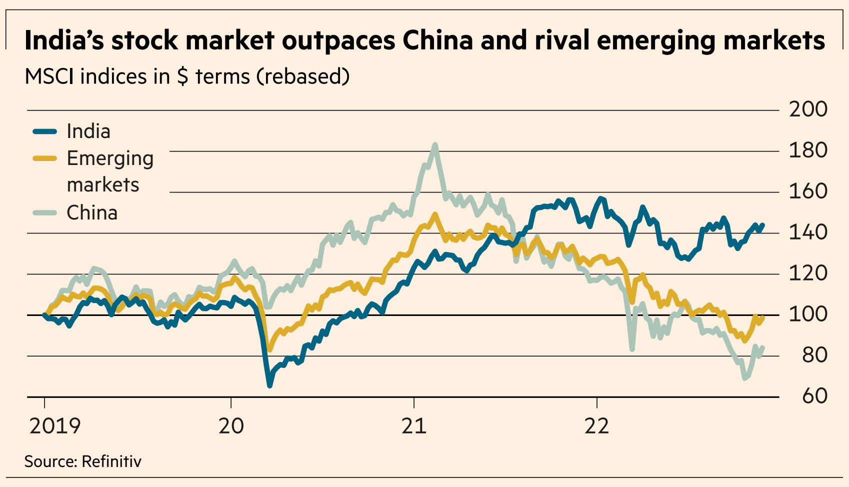
"India benefited from the move away from China following Beijing's crackdown on the tech sector in 2020s," said Steven Holden, chief executive of Copley Fund Research, a data provider. "But the rotation into India is running out of steam and instead emerging market funds are raising their allocations to Brazil, Saudi Arabia and some Asean nations."

Returns this year for international investors have been dented by weakness in the rupee against the dollar with the MSCI India index down 2.6 per cent in US currency terms.

India's stock market "looks expensive", said Robert Buckland, global equity strategist at Citigroup, but this is justified by robust earnings growth.

"India's high valuation is enough to keep many investors cautious but Indian companies are very good at turning [economic activity] into earnings," said Buckland.

> 'Indian companies are very good at turning economic activity into earnings'

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ft.com/markets

Equities

## Beijing's softer Covid stance boosts shares and currency

HUDSON LOCKETT — HONG KONG
TOM MITCHELL — SINGAPORE

Chinese stocks shot higher and the renminbi hit a 12-week high against the dollar yesterday on more signs that Beijing was easing its harsh zero-Covid restrictions and as Morgan Stanley upgraded the country's equities to "overweight".

Hong Kong's Hang Seng China Enterprises index jumped 5.1 per cent, while the CSI 300 index of Shanghai and Shenzhen-listed stocks rose 2 per cent.

China's currency also rallied, with the renminbi rising 1.3 per cent against the greenback to Rmb6.9629, the highest level since September.

The gains for Chinese assets come on the heels of further easing of Covid-19 restrictions over the weekend, stoking expectations that authorities may drop the country's longstanding economically disruptive zero-Covid policy more quickly than expected.

Officials in Beijing, Shanghai and Shenzhen said that commuters would no longer need to present PCR test results to use public transport, while some apartment complexes in Beijing told residents that they could quarantine at home if they tested positive.

Easing measures, however, vary widely across the country and are often not as aggressive as hoped. Beijing appeared to be on the cusp of easing strict 48-hour testing requirements as many testing sites were closed over the past week.

> 'Positive developments alongside a clear path set towards reopening warrant an upgrade'

Most public venues continued to require proof of a recent negative test before allowing people to enter, although enforcement of the requirement was uneven across the city.

Yesterday the National Health Commission reported there had been more than 30,000 new confirmed cases a day earlier, down from a peak of about 36,000 early last week. The majority of new cases were asymptomatic. Health authorities were also continuing to quarantine millions of people who test positive or their close contacts, although they may now be allowed to isolate at home rather than in centralised facilities depending on local guidelines.

The latest easing of restrictions came amid a broad wave of optimism in markets about the prospects for reopening.

Analysts at Morgan Stanley upgraded their position on equities in the benchmark MSCI China index from "equal-weight" to "overweight".

"Multiple positive developments alongside a clear path set towards reopening warrant an upgrade," they wrote yesterday.

The strategists pointed to an acceleration in easing of curbs, the stabilisation of China's property market and signs that a crackdown on tech groups launched in 2021 may be wrapping up.

*Additional reporting by Xinning Liu and Nian Liu in Beijing*

Asset management

## US groups face backlash for bypassing shareholders on senior executive pay

PATRICK TEMPLE-WEST — NEW YORK

**A growing number of US companies — including two backed by British entrepreneur Richard Branson — are expected to face fire from investors in the coming months over a once-obscure pay practice that has let them reward executives without consulting shareholders.**

Thanks to the explosion of special purpose acquisition companies that started in 2020, pay provisions allowing businesses to issue new shares year after year without going to investors for approval have become increasingly common.

Companies like these "evergreen" provisions because they can continue to reward executives with stock after their share prices have plummeted.

But institutional investors detest the provisions, which dilute holdings without them having a say.

During the stock market boom last year, Spacs and other businesses that went public incorporated evergreen provisions with little opposition.

Now, 611 companies in the Russell 3000 have this year disclosed evergreen provisions in their active equity plans, according to an analysis by ISS Corporate Solutions, a data provider.

That figure has increased every year since 2017 when 263 Russell 3000 companies had evergreen provisions, ICS said. And at least 167 Spacs that have gone public since the start of 2021 have included evergreen provisions, ICS data show.

The use of evergreen provisions "saw a significant uptick — especially among small cap companies — in 2020 and 2021, and it has continued to go up in 2022," said Jun Frank, a managing director for compensation and governance advisory at ICS in San Francisco.

Companies with evergreen provisions include two Spacs promoted by Branson: Grove Collaborative, an ecommerce business for eco-friendly products, and 23andMe, a genetics testing group.

Grove's shares are trading for less than $1, down from $10 when it went public in June. Shares of 23andMe are down 48 per cent year to date. Both companies will face shareholders when they hold their annual meetings in 2023.

As pay performance targets have become more difficult to hit during the stock market sell-off, "we've become wary of companies using tools like evergreen provisions to pay executives," said Ben Colton, global head of stewardship at State Street Global Advisors.

BlackRock and Vanguard also have voting policies that typically oppose evergreen provisions.

In a sign of what is to come for Spac companies and others with new evergreen provisions when they face shareholders in 2023, large asset managers have already attacked evergreen provisions this year.

SoFi, a fintech company that went public in January 2021 via a Spac set up by Chamath Palihapitiya, changed its evergreen provision this year to issue more shares. Both BlackRock and Vanguard voted against the company's new equity plan, and it passed with just 59 per cent of shareholder support in July.

A 23andMe spokeswoman said the evergreen provisions in the company's 2021 equity incentive plan increase the pool of shares for all employees, not just executives.

Grove, SoFi and Veeva did not respond to requests for comment.

Asset management

## Institutions demand end to 'forever' chemicals linked with health problems

CHRIS FLOOD

**A coalition of institutional investors is demanding the phaseout of hazardous "forever" chemicals, the latest move by asset managers to expand their efforts to address environmental risks beyond climate change to biodiversity and human health concerns.**

Widely used in food packaging, cookware, clothing and carpets, forever chemicals are a group of more than 9,000 compounds that do not break down in the environment and are associated with human health problems including cancers and reproductive abnormalities.

Also known as PFAS (perfluoroalkyl and polyfluoroalkyl substances), forever chemicals have been found in the blood of 97 per cent of Americans, according to the US government.

Aviva Investors and Storebrand Asset Management have co-ordinated the campaign by 47 institutional investors with $8tn in combined assets.

It is targeting 54 chemicals companies including DuPont, 3M, Dow, Eastman Chemical, Air Liquide, Akzo Nobel, BASF, Bayer and Solvay.

The investors want manufacturers to establish a global register of PFAS and details of the production volumes of each of the hazardous substances. While data on the production and sale of PFAS are published in the EU and US, this is not required elsewhere in the world.

Just four of the 54 companies — Indorama in Thailand, Saudi Arabia's Sabic, Yara of Norway and Belgium's Solvay — have a public strategy to phase out hazardous chemicals, according to ChemSec, an independent non-profit consultancy partly funded by the Swedish government.

> 'Most companies are taking little or no action to phase out hazardous chemicals'

"Most companies are taking little or no action to phase out hazardous chemicals despite the risks to public health and the environment," said Sonja Haider, a senior adviser at ChemSec. "They are turning a blind eye to an unfolding pollution crisis."

Eugenie Mathieu, senior ESG analyst at Aviva Investors, said the lack of transparency and accountability regarding PFAS was comparable with the denials of harm to humans made by tobacco companies since the 1950s.

"It is very difficult for consumers to avoid exposure to these harmful substances and it is vital for chemical companies to be more transparent," she said. "Shareholders have very restricted visibility of the potential liabilities arising from forever chemicals, which is a concern given the growth in the number of PFAS lawsuits."

Victoria Lidén, sustainability analyst at Storebrand Asset Management, said it would raise concerns about PFAS at board level, support shareholder resolutions and vote against the election of directors if engagement efforts proved unproductive.

"There has already been an impact on the share prices of chemical companies because of the reputational and litigation risks associated with PFAS," Lidén said. "Companies have already had to make significant provisions on their balance sheets and these PFAS liabilities could become huge in the future."

# The day in the markets

## What you need to know

- US stocks stumble following hotter than expected services data
- Dollar gains as traders reassess the inflationary outlook
- Chinese equities surge as Beijing eases zero-Covid restrictions

Wall Street stocks fell sharply yesterday after fresh data showed that the vast US services sector was still growing, even though the Federal Reserve has been trying to cool the world's biggest economy with aggressive interest rate rises.

Economic activity in the services sector increased for the 30th month in a row in November to hit 56.5, up from 54.4 in October, data from the Institute for Supply Management showed.

Economists polled by Reuters had expected the index to decline to 53.3 — a number more than 50 signals growth.

US equities sold off after the report, with Wall Street's benchmark S&P 500 down 1.2 per cent in New York and the tech-heavy Nasdaq Composite losing 1.3 per cent.

US equities had marched steadily higher over the past fortnight on the back of hopes that inflation may have peaked and that the Fed would slow its interest rate rises in December as a result.

Andrew Hunter, senior US economist at Capital Economics, warned that the services sector was unlikely to remain quite so buoyant for long, however.

"We suspect that resilience will fade next year as higher interest rates start to take a bigger toll," Hunter said.

The US Dollar index, a measure of the currency's strength against six of its peers, rose 0.6 per cent as traders reassessed the inflationary outlook.

Prices of US government bonds fell with the yield on the interest rate-sensitive two-year Treasury rising 7 basis points to 4.35 per cent.

The yield on the benchmark 10-year note also added 7bp to 3.57 per cent.

In commodity markets, oil prices gave up early gains as investors weighed the impact of western restrictions on Russian oil and the prospect of higher demand from China next year as it eases its growth-damping zero-Covid policies.

Brent crude, the international benchmark, fell 1 per cent to $84.75 after Opec and its allies opted not to alter the cartel's output targets.

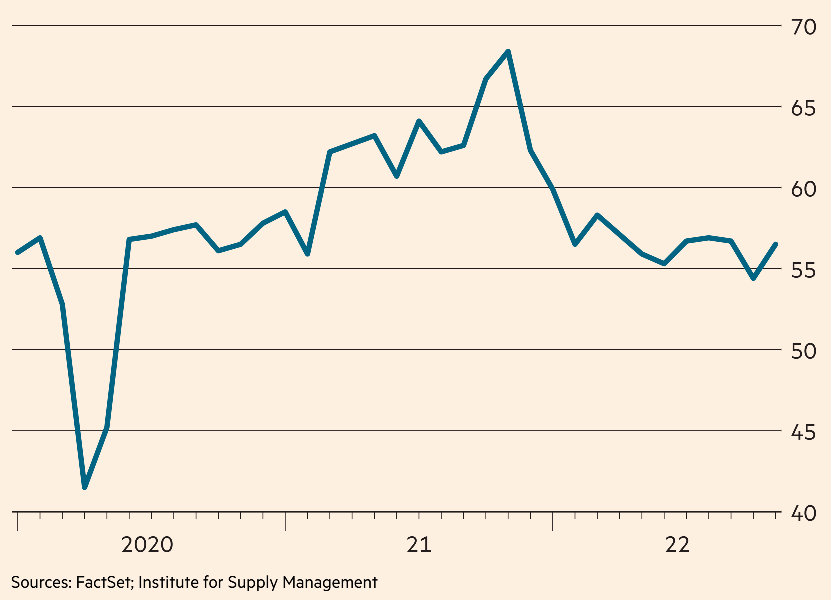
Reports that several cities across China had relaxed Covid restrictions boosted equities in Asia.

Hong Kong's Hang Seng index rose 4.5 per cent and has risen more than 17 per cent in the past month, while the CSI 300 index of Shanghai and Shenzhen stocks added 2 per cent.

The pan-regional Stoxx Europe 600 fell 0.4 per cent after data showed a 1.8 per cent decline in eurozone retail turnover in October. **George Steer**

**Vast US services sector continues expanding despite Fed tightening**

ISM non-manufacturing PMI




Sources: FactSet; Institute for Supply Management

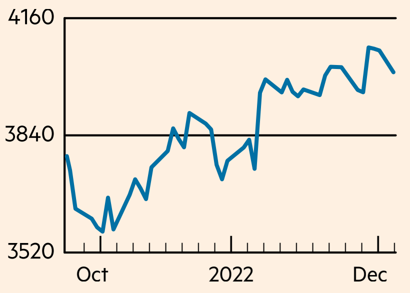
## Markets update

| | US | Eurozone | Japan | UK | China | Brazil |
|---|---|---|---|---|---|---|
| **Stocks** | **S&P 500** | **Eurofirst 300** | **Nikkei 225** | **FTSE100** | **Shanghai Comp** | **Bovespa** |
| Level | 4012.24 | 1743.77 | 27820.40 | 7567.54 | 3211.81 | 110248.34 |
| % change on day | -1.46 | -0.47 | 0.15 | 0.15 | 1.76 | -1.50 |
| **Currency** | **$ index (DXY)** | **$ per €** | **Yen per $** | **$ per £** | **Rmb per $** | **Real per $** |
| Level | 104.241 | 1.053 | 136.290 | 1.222 | 6.958 | 5.257 |
| % change on day | -0.291 | 0.573 | 0.602 | 0.000 | -1.147 | 0.442 |
| **Govt. bonds** | **10-year Treasury** | **10-year Bund** | **10-year JGB** | **10-year Gilt** | **10-year bond** | **10-year bond** |
| Yield | 3.575 | 1.877 | 0.253 | 3.099 | 2.918 | 12.298 |
| Basis point change on day | -0.020 | 2.800 | 0.640 | -4.900 | 1.500 | 3.900 |
| **World index, Commods** | **FTSE All-World** | **Oil - Brent** | **Oil - WTI** | **Gold** | **Silver** | **Metals (LMEX)** |
| Level | 414.00 | 84.75 | 79.04 | 1784.75 | 22.61 | 4033.90 |
| % change on day | -0.94 | -0.96 | -1.18 | -1.02 | 2.12 | 1.75 |

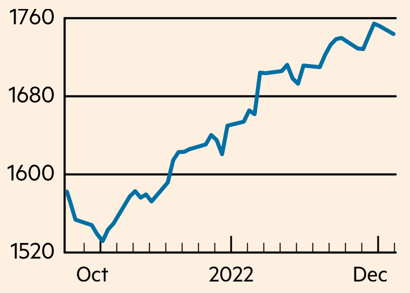
Yesterday's close apart from: Currencies = 16:00 GMT; S&P, Bovespa, All World, Oil = 17:00 GMT; Gold, Silver = London pm fix. Bond data supplied by Tullett Prebon.

## Main equity markets

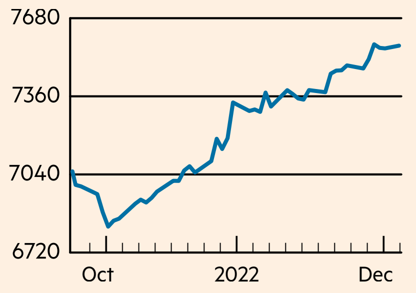
**S&P 500 index**




**Eurofirst 300 index**




**FTSE 100 index**




### Biggest movers

| % | US | | Eurozone | | UK | |
|---|---|---|---|---|---|---|
| Ups | United Airlines Holdings | 2.76 | Grifols | 3.63 | Prudential | 5.34 |
| | Solaredge | 2.43 | Saipem | 2.30 | Rio Tinto | 1.56 |
| | Mgm Resorts Int | 1.94 | Erste Bank | 1.61 | Anglo American | 1.24 |
| | Delta Air Lines | 1.34 | Deutsche Bank | 1.58 | Haleon | 1.22 |
| | Boeing | 1.32 | Volkswagen | 1.49 | Frasers | 1.18 |
| Downs | Vf | -8.28 | Ucb | -3.54 | London Stock Exchange | -3.53 |
| | Zions Ban Na | -7.43 | Orange | -3.19 | Entain | -2.40 |
| | Signature Bank | -7.21 | Bayer | -3.08 | Hargreaves Lansdown | -2.00 |
| | Epam Systems | -6.59 | Bouygues | -3.07 | M&g | -1.97 |
| | Paycom Software | -6.01 | Akzo Nobel | -2.81 | Burberry | -1.85 |

Prices taken at 17:00 GMT. Based on the constituents of the FTSE Eurofirst 300 Eurozone. All data provided by Morningstar unless otherwise noted.

## Wall Street

Electric-car maker **Tesla** sank following reports that it was planning on lowering production at its Shanghai factory.

The move could trim output at the Chinese plant by about a fifth from full capacity, said the articles.

Reuters was later told by a Tesla representative that this was "false news".

Biopharma group **Yumanity Therapeutics**, which specialises in discovering therapies for neurodegenerative diseases, jumped on announcing that it would be returning more money to shareholders.

Its board declared a special dividend — estimated to be in the range of $1.34 to $1.43 per share — following an asset sale to Janssen Pharmaceuticals and a merger with Kineta first revealed in June.

The dividend would be paid later this month to stockholders of record at the close of business on December 15.

Dating app **Grindr**, which is focused on the LGBTQ+ community, advanced with chief executive George Arison declaring "an excellent third quarter".

Revenue rose 32 per cent year on year to $50.4mn as average revenue per paying user climbed to $17.67 from $16.66 a year earlier.

Water utilities company **SJW Group** leapt after news it would be joining the S&P Small Cap 600 index on December 19. *Ray Douglas*

## Europe

Sweden's **Readly** soared after its "bid committee" recommended a cash offer for the digital newspaper and magazine subscription service.

The SKr12 per share bid by Nordic media operator Bonnier News represented a 59 per cent premium on Friday's closing price and gave the group a value of SKr455mn ($44mn).

The acceptance period for the offer expires on January 13 next year and was conditional on Bonnier securing more than 90 per cent of the shares.

Some promising clinical results lifted French vaccine maker **Valneva**, which reported positive 12-month data for a single dose of its Chikungunya candidate, VLA1553.

Chikungunya is a mosquito-borne viral disease that causes fever, headache, nausea plus joint and muscle pain. These results meant Valneva was on track to finalise its biologics license application with the US Food and Drug Administration by the end of this year.

German online broker **flatexDEGIRO** dived after an ad hoc press release over the weekend in which it lowered its full-year revenue and margin guidance.

It also was initiating "various measures to comply with the regulatory requirements" of financial watchdog BaFin, which had conducted a special audit earlier this year. *Ray Douglas*

## London

A well-received purchase lifted **AG Barr**, which announced the acquisition of energy drinks business Boost for £20mn upfront plus up to £12mn dependent on future revenue and profitability performance.

Liberum said it was a "very sensible" move by the Scottish group, arguing there were "meaningful medium-term margin gains to be had once the business is integrated into AG Barr's vertically integrated model".

Boost offered "long-term high growth in categories that" complemented AG Barr brands such as Irn-Bru and Rubicon soft drinks, said the broker.

Natural gas producer **Wentworth Resources** surged on news that it was being bought by France's Maurel & Prom for 32.5p a share, a 30 per cent premium on its most recent closing price and a "material increase to the initial indicative" bid by M&P in September, it said.

The transaction valued Wentworth, which operates in Tanzania, at £61.7mn.

Cinema chain **Cineworld** remained elevated after Friday's rally triggered by a Bloomberg report that said its creditors had held talks about a break-up and selling its eastern European divisions.

Yesterday's rise came despite Cineworld telling the news group on Sunday that it intended to emerge from bankruptcy intact. *Ray Douglas*

# There is no substitute for alternative assets

## Elif Aktug

### Markets Insight

What alternatives do investors have in a crisis? Public markets are suffering their worst pummelling in a generation or more. In such broad turmoil, private markets offer a compelling investment.

This is a path that comes with its own perils given the real risks in democratising private markets for retail investors.

But for seasoned investors, including family offices, wealthy individuals and institutional clients, there is no alternative to alternative assets such as private equity and hedge funds.

Diversifying portfolios is becoming essential in building resilience.

Worldwide, interest rates are rising, inflation is hovering at multi-decade highs and geopolitical tensions are prominently on investors' minds.

Much column space is dedicated to predicting the implications, yet it is revealing to step back and note where we stand — 2022 has, to date, been the worst year for US 50/50 bond and equity portfolios since 1932.

As the low-yield world of the past decade has given way to a higher-volatility environment, the focus is shifting towards protecting capital over the longer term. From 2015-21, alternative assets rose from $7tn to $15tn globally. Once-niche investment strategies, these are now genuinely mainstream and can generate superior long-term returns.

One downside investors must deal with is illiquidity. Yet a simple shift in perceptions can cast this in a different light. Illiquidity can add value during volatile cycles. Private assets can protect investors against their own — sometimes unconscious — biases, locking them in for an entire cycle or longer and removing the temptation to sell at the bottom of the market.

The extent, severity and duration of a global downturn — paired with the end of the cheap money era — is a natural concern given private assets demand a long-term commitment.

Another headwind often mentioned are valuations in private assets: they tend to lag behind the market by as much as six months, often lack in transparency and are susceptible to economic cycles due to debt levels.

However, at the depths of the global financial crisis, private equity suffered smaller losses than public markets. It also returned to pre-crisis value in just two years, a point when public equity markets were still down 20 per cent.

> At the depths of the global financial crisis, private equity suffered smaller losses than public markets

This was not a one-off — Bain Consulting data shows that investors in global private equity buyouts consistently outperformed long-term averages in the years following a marked downturn.

As the cost of borrowing rises, investors are understandably concerned that high-yield corners of the debt market, traditionally used to fund buyouts, could become expensive and scarce.

But, as interest rates fell over the past decade, buyout financing costs remained steady at 6-7 per cent. By the same logic, they may retain some protection against rising rates.

Most private assets are inherently long-term investments. Last year marked a peak in the cycle of exits by private equity from investments.

In the short term, initial public offerings will be difficult as public markets suffer. In better times, transactions between different funds have allowed private equity managers a route to liquidity. And while concerns exist over what some see as a game of musical chairs, it is important to differentiate between cases of "pass-the parcel" deals and those companies attracting capital for innovation.

As the industry sees a flight to quality, investors are likely to reduce the funds they back, remaining with trusted partners with the ability to source deals and create value.

Private equity firms must seek new ways of creating value, in particular operational improvements focusing on energy transition and digitisation.

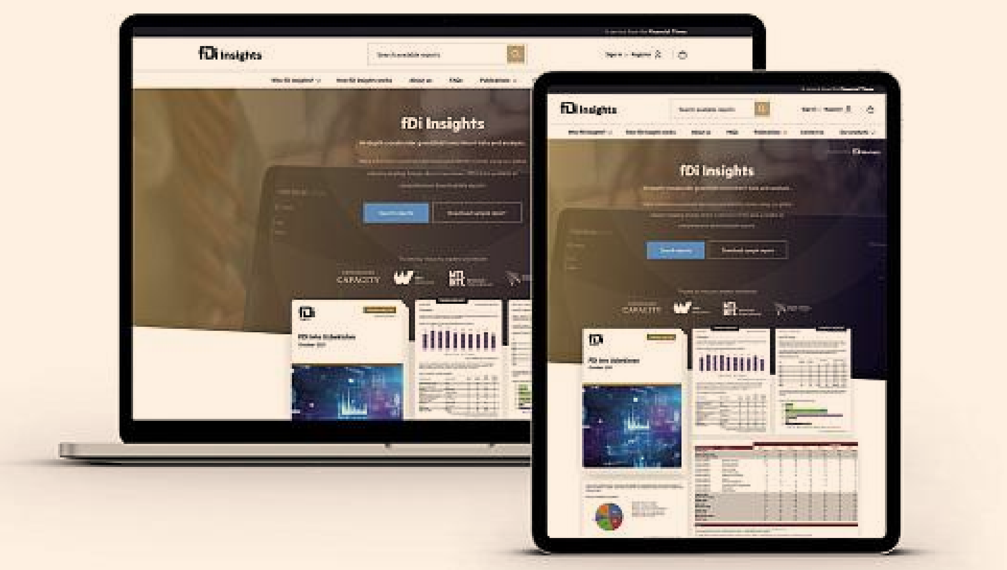
In this high-inflation environment, investors are targeting secular growth trends and real assets such as property — historically seen as a hedge against inflation. One example is the opportunity in repurposing existing buildings to make them greener, helping investors meet commitments on environment, social and governance factors.

Private markets are not for the unwary and one needs to be conscious that the prospect of higher returns come at the cost of illiquidity. For all the benefits, there are evidently drawbacks.

Inflation and geopolitical uncertainty are considerations, though not all negative. Embracing the trend and raising allocation to alternatives can bring higher returns and lower volatility to a portfolio. But a long-term view is vital.

*Elif Aktug is managing partner at the Pictet Group*

fDi Insights

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# MARKET DATA

## WORLD MARKETS AT A GLANCE

FT.COM/MARKETSDATA

Change during previous day's trading (%)

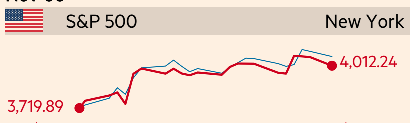
| S&P 500 | Nasdaq Composite | Dow Jones Ind | FTSE 100 | FTSE Eurofirst 300 | Nikkei | Hang Seng | FTSE All World $ | $ per € | $ per £ | ¥ per $ | £ per € | Oil Brent $ Sep | Gold $ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| -1.46% | -1.52% | -1.15% | 0.15% | -0.47% | 0.15% | 4.51% | -0.94% | 0.573% | No change | 0.602% | 0.583% | 2.96% | -1.02% |

Stock Market movements over last 30 days, with the FTSE All-World in the same currency as a comparison

### AMERICAS

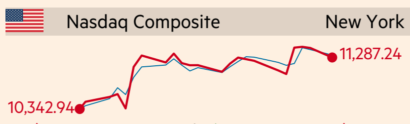
Nov 06 - - — Index — All World

**S&P 500** New York



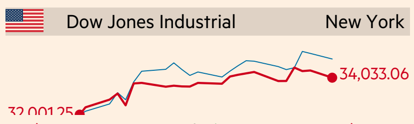

Day ↘ -1.46% Month ↗ 6.44% Year ↘ -11.57%

**Nasdaq Composite** New York




Day ↘ -1.52% Month ↗ 7.79% Year ↘ -25.15%

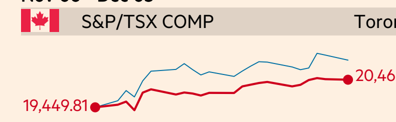
**Dow Jones Industrial** New York




Day ↘ -1.15% Month ↗ 5.02% Year ↘ -1.59%

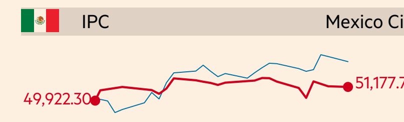
Nov 06 - Dec 05 — Index — All World

**S&P/TSX COMP** Toronto



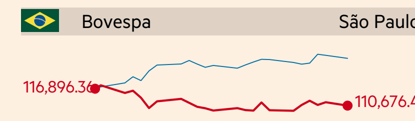

Day ↘ -0.89% Month ↗ 4.45% Year ↘ -1.54%

**IPC** Mexico City




Day ↘ -0.91% Month ↘ -0.81% Year ↗ 0.32%

**Bovespa** São Paulo




Day ↘ -1.50% Month ↘ -6.72% Year ↗ 4.89%

### EUROPE

Nov 06 - Dec 05 — Index — All World

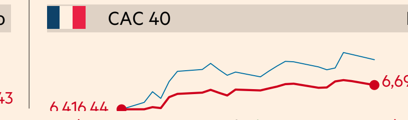
**FTSE 100** London

Day ↗ 0.15% Month ↗ 3.29% Year ↗ 6.37%

**FTSE Eurofirst 300** Europe

Day ↘ -0.47% Month ↗ 5.79% Year ↘ -2.67%

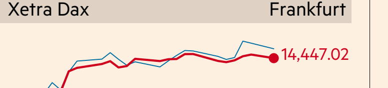
**CAC 40** Paris




Day ↘ -0.67% Month ↗ 4.37% Year ↘ -1.01%

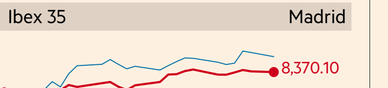
Nov 06 - Dec 05 — Index — All World

**Xetra Dax** Frankfurt



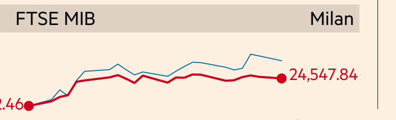

Day ↘ -0.56% Month ↘ -0.64% Year NaN%

**Ibex 35** Madrid




Day ↘ -0.15% Month ↗ 5.38% Year ↗ 1.56%

**FTSE MIB** Milan

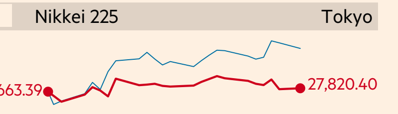



Day ↘ -0.30% Month ↗ 5.50% Year ↘ -5.30%

### ASIA

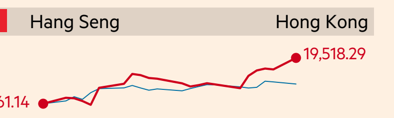
Nov 06 - Dec 05 — Index — All World

**Nikkei 225** Tokyo



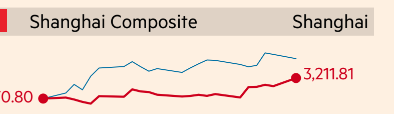

Day ↗ 0.15% Month ↗ 2.22% Year ↘ -0.80%

**Hang Seng** Hong Kong




Day ↗ 4.51% Month ↗ 20.88% Year ↘ -17.85%

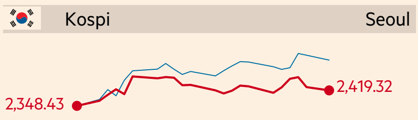
**Shanghai Composite** Shanghai




Day ↗ 1.76% Month ↗ 6.94% Year ↘ -10.97%

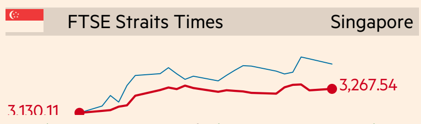
Nov 06 - Dec 05 — Index — All World

**Kospi** Seoul



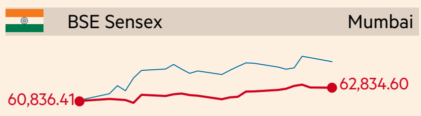

Day ↘ -0.62% Month ↗ 3.02% Year ↘ -18.50%

**FTSE Straits Times** Singapore




Day ↗ 0.26% Month ↗ 4.55% Year ↗ 5.50%

**BSE Sensex** Mumbai




Day ↘ -0.05% Month ↗ 3.01% Year ↗ 8.82%

| Country | Index | Latest | Previous |
|---|---|---|---|
| Argentina | Merval | 167480.25 | 169765.68 |
| Australia | All Ordinaries | 7527.80 | 7503.50 |
| | S&P/ASX 200 | 7325.60 | 7301.50 |
| | S&P/ASX 200 Res | 6168.80 | 6071.50 |
| Austria | ATX | 3211.71 | 3207.50 |
| Belgium | BEL 20 | 3733.99 | 3754.22 |
| | BEL Mid | 9593.05 | 9544.83 |
| Brazil | IBovespa | 110248.34 | 111923.93 |
| Canada | S&P/TSX 60 | 1228.92 | 1239.14 |
| | S&P/TSX Comp | 20303.59 | 20485.66 |
| | S&P/TSX Div Met & Min | 1537.51 | 1511.74 |
| Chile | S&P/CLX IGPA Gen | 28334.63 | 28411.68 |
| China | FTSE A200 | 10438.64 | 10254.45 |
| | FTSE B35 | 9000.71 | 8988.96 |
| | Shanghai A | 3366.49 | 3308.06 |
| | Shanghai B | 293.41 | 290.74 |
| | Shanghai Comp | 3211.81 | 3156.14 |
| | Shenzhen A | 2157.84 | 2138.98 |
| | Shenzhen B | 1165.47 | 1153.45 |
| Colombia | COLCAP | 1261.61 | 1260.21 |
| Croatia | CROBEX | 2013.05 | 2011.29 |

| Country | Index | Latest | Previous |
|---|---|---|---|
| Cyprus | CSE M&P Gen | 68.46 | 68.68 |
| Czech Republic | PX | 1202.79 | 1198.62 |
| Denmark | OMXC Copenahgen 20 | 1819.34 | 1815.30 |
| Egypt | EGX 30 | 14327.77 | 14078.53 |
| Estonia | OMX Tallinn | 1777.45 | 1760.36 |
| Finland | OMX Helsinki General | 11233.43 | 11243.33 |
| France | CAC 40 | 6696.96 | 6742.25 |
| | SBF 120 | 5139.14 | 5172.71 |
| Germany | M-DAX | 25903.45 | 26183.85 |
| | TecDAX | 3111.25 | 3137.63 |
| | XETRA Dax | 14447.61 | 14529.39 |
| Greece | Athens Gen | 903.00 | 922.42 |
| | FTSE/ASE 20 | 2191.06 | 2250.37 |
| Hong Kong | Hang Seng | 19518.29 | 18675.35 |
| | HS China Enterprise | 6706.29 | 6368.74 |
| | HSCC Red Chip | 3621.51 | 3539.74 |
| Hungary | Bux | 44666.01 | 45804.29 |
| India | BSE Sensex | 62834.60 | 62868.50 |
| | Nifty 500 | 15967.20 | 15963.50 |
| Indonesia | Jakarta Comp | 6987.33 | 7019.64 |
| Ireland | ISEQ Overall | 7272.36 | 7294.05 |
| Israel | Tel Aviv 125 | 1907.82 | 1912.00 |

| Country | Index | Latest | Previous |
|---|---|---|---|
| Italy | FTSE Italia All-Share | 26623.23 | 26682.21 |
| | FTSE Italia Mid Cap | 40410.07 | 40497.08 |
| | FTSE MIB | 24547.84 | 24621.72 |
| Japan | 2nd Section | 7228.27 | 7239.06 |
| | Nikkei 225 | 27820.40 | 27777.90 |
| | S&P Topix 150 | 1675.01 | 1679.46 |
| | Topix | 1947.90 | 1953.98 |
| Jordan | Amman SE | 2505.73 | 2500.97 |
| Kenya | NSE 20 | 1649.99 | 1639.38 |
| Kuwait | KSX Market Index | 6633.44 | 6603.51 |
| Latvia | OMX Riga | 1119.76 | 1115.47 |
| Lithuania | OMX Vilnius | 950.20 | 947.78 |
| Luxembourg | LuxX | 1497.72 | 1472.74 |
| Malaysia | FTSE Bursa KLCI | 1471.56 | 1481.80 |
| Mexico | IPC | 50767.27 | 51234.37 |
| Morocco | MASI | 11028.15 | 11022.18 |
| Netherlands | AEX | 727.09 | 731.04 |
| | AEX All Share | 992.67 | 996.45 |
| New Zealand | NZX 50 | 11677.75 | 11641.85 |
| Nigeria | SE All Share | 48154.65 | 47656.64 |
| Norway | Oslo All Share | 1017.37 | 1006.88 |
| Pakistan | KSE 100 | 41612.67 | 42150.10 |

| Country | Index | Latest | Previous |
|---|---|---|---|
| Philippines | Manila Comp | 6442.13 | 6489.65 |
| Poland | Wig | 56367.57 | 56207.29 |
| Portugal | PSI 20 | 5865.47 | 5856.57 |
| | PSI General | 4507.02 | 4510.37 |
| Romania | BET Index | 12119.15 | 11924.70 |
| Russia | Micex Index | 2436.57 | 2445.30 |
| | RTX | 1245.71 | 1212.57 |
| Saudi-Arabia | TADAWUL All Share Index | 10723.95 | 10822.65 |
| Singapore | FTSE Straits Times | 3267.54 | 3259.14 |
| Slovakia | SAX | 341.88 | 341.88 |
| Slovenia | SBI TOP | - | - |
| South Africa | FTSE/JSE All Share | 74693.42 | 74322.91 |
| | FTSE/JSE Res 20 | 74781.25 | 74020.33 |
| | FTSE/JSE Top 40 | 68543.44 | 68237.46 |
| South Korea | Kospi | 2419.32 | 2434.33 |
| | Kospi 200 | 313.91 | 315.02 |
| Spain | IBEX 35 | 8370.10 | 8382.60 |
| Sri Lanka | CSE All Share | 8843.75 | 8769.73 |
| Sweden | OMX Stockholm 30 | 2139.69 | 2129.47 |
| | OMX Stockholm AS | 821.22 | 816.60 |
| Switzerland | SMI Index | 11194.67 | 11198.13 |

| Country | Index | Latest | Previous |
|---|---|---|---|
| Taiwan | Weighted Pr | 14980.74 | 14970.68 |
| Thailand | Bangkok SET | 1641.63 | 1648.44 |
| Turkey | BIST 100 | 4957.77 | 4957.77 |
| UAE | Abu Dhabi General Index | 9222.93 | 9251.11 |
| UK | FT 30 | 2525.10 | 2532.00 |
| | FTSE 100 | 7567.54 | 7556.23 |
| | FTSE 4Good UK | 6808.45 | 6805.50 |
| | FTSE All Share | 4143.21 | 4138.81 |
| | FTSE techMARK 100 | 6361.18 | 6366.94 |
| USA | DJ Composite | 11304.92 | 11468.31 |
| | DJ Industrial | 34033.06 | 34429.88 |
| | DJ Transport | 14172.02 | 14520.96 |
| | DJ Utilities | 968.92 | 975.79 |
| | Nasdaq 100 | 11834.85 | 11994.26 |
| | Nasdaq Cmp | 11287.24 | 11461.50 |
| | NYSE Comp | 15526.99 | 15767.02 |
| | S&P 500 | 4012.24 | 4071.70 |
| | Wilshire 5000 | 39842.99 | 40504.14 |
| Venezuela | IBC | 15324.54 | 15188.30 |
| Vietnam | VNI | 1093.67 | 1080.01 |

| Country | Index | Latest | Previous |
|---|---|---|---|
| Cross-Border | DJ Global Titans ($) | 426.75 | 431.26 |
| | Euro Stoxx 50 (Eur) | 3962.63 | 3977.90 |
| | Euronext 100 ID | 1281.96 | 1289.73 |
| | FTSE 4Good Global ($) | 9857.43 | 9959.06 |
| | FTSE All World ($) | 414.00 | 417.91 |
| | FTSE E300 | 1743.77 | 1751.99 |
| | FTSE Eurotop 100 | 3441.11 | 3455.40 |
| | FTSE Global 100 ($) | 2546.09 | 2573.09 |
| | FTSE Gold Min ($) | 1761.15 | 1770.66 |
| | FTSE Latibex Top (Eur) | 4440.00 | 4432.20 |
| | FTSE Multinationals ($) | 2728.95 | 2736.81 |
| | FTSE World ($) | 750.19 | 758.81 |
| | FTSEurofirst 100 (Eur) | 4641.38 | 4663.44 |
| | FTSEurofirst 80 (Eur) | 5371.56 | 5401.70 |
| | MSCI ACWI Fr ($) | 633.54 | 635.51 |
| | MSCI All World ($) | 2733.03 | 2741.08 |
| | MSCI Europe (Eur) | 1781.52 | 1782.59 |
| | MSCI Pacific ($) | 2652.94 | 2687.14 |
| | S&P Euro (Eur) | 1771.46 | 1780.98 |
| | S&P Europe 350 (Eur) | 1787.07 | 1795.76 |
| | S&P Global 1200 ($) | 2987.15 | 3022.74 |
| | Stoxx 50 (Eur) | 3796.02 | 3805.46 |

(c) Closed. (u) Unavaliable. † Correction. ♥ Subject to official recalculation. For more index coverage please see www.ft.com/worldindices. A fuller version of this table is available on the ft.com research data archive.

## STOCK MARKET: BIGGEST MOVERS

**AMERICA**

| ACTIVE STOCKS | stock traded m's | close price | Day's change |
|---|---|---|---|
| Tesla | 92.2 | 184.17 | -10.69 |
| Apple | 51.3 | 146.45 | -1.36 |
| Nvidia | 28.0 | 167.87 | -0.89 |
| Amazon.com | 27.9 | 92.04 | -2.09 |
| Meta Platforms | 21.7 | 122.90 | -0.59 |
| Microsoft | 20.1 | 250.89 | -4.13 |
| Advanced Micro Devices | 15.8 | 74.04 | -0.94 |
| Netflix | 12.8 | 317.07 | -3.34 |
| Boeing | 11.3 | 185.28 | 2.41 |
| Alphabet | 10.6 | 100.27 | -0.17 |

| BIGGEST MOVERS | Close price | Day's change | Day's chng% |
|---|---|---|---|
| **Ups** | | | |
| United Airlines Holdings | 45.10 | 1.21 | 2.76 |
| Solaredge | 316.28 | 7.51 | 2.43 |
| Mgm Resorts Int | 37.80 | 0.72 | 1.94 |
| Delta Air Lines | 36.19 | 0.48 | 1.34 |
| Boeing | 185.28 | 2.41 | 1.32 |
| **Downs** | | | |
| Vf | 30.47 | -2.75 | -8.28 |
| Zions Ban Na | 48.37 | -3.88 | -7.43 |
| Signature Bank | 126.19 | -9.81 | -7.21 |
| Epam Systems | 345.47 | -24.37 | -6.59 |
| Paycom Software | 319.45 | -20.42 | -6.01 |

Based on the constituents of the S&P500

**LONDON**

| ACTIVE STOCKS | stock traded m's | close price | Day's change |
|---|---|---|---|
| Shell | 377.8 | 2375.50 | 10.00 |
| Glencore | 131.7 | 561.60 | 3.30 |
| Astrazeneca | 130.5 | 11260.00 | 82.00 |
| Bp | 129.7 | 483.50 | 2.60 |
| Anglo American | 118.4 | 3337.00 | 41.00 |
| Prudential | 93.0 | 1085.50 | 55.00 |
| Rio Tinto | 90.6 | 5671.00 | 87.00 |
| British American Tobacco | 81.0 | 3430.50 | 22.50 |
| Gsk | 80.5 | 1422.20 | -1.80 |
| Unilever | 77.1 | 4179.00 | 1.00 |

| BIGGEST MOVERS | Close price | Day's change | Day's chng% |
|---|---|---|---|
| **Ups** | | | |
| Prudential | 1085.50 | 55.00 | 5.34 |
| Fidelity China Special Situations | 235.50 | 10.50 | 4.67 |
| Vinacapital Vietnam Opportunity Fund Ld | 459.00 | 17.00 | 3.85 |
| Carnival | 720.80 | 24.20 | 3.47 |
| Hammerson | 24.27 | 0.72 | 3.06 |
| **Downs** | | | |
| Savills | 851.00 | -88.00 | -9.37 |
| Plus500 Ltd | 1814.00 | -121.00 | -6.25 |
| Ascential | 213.40 | -12.80 | -5.66 |
| Home Reit | 50.10 | -2.80 | -5.29 |
| Network Int Holdings | 338.80 | -17.20 | -4.83 |

Based on the constituents of the FTSE 350 index

**EURO MARKETS**

| ACTIVE STOCKS | stock traded m's | close price | Day's change |
|---|---|---|---|
| Novartis N | 421.0 | 86.86 | 1.68 |
| Roche Gs | 384.7 | 313.39 | 1.32 |
| Nestle N | 369.5 | 112.68 | -1.72 |
| Cs N | 241.6 | 3.07 | 0.09 |
| Totalenergies | 182.6 | 58.94 | 0.05 |
| Ubs N | 177.1 | 17.81 | 0.29 |
| Asml Holding | 171.6 | 575.80 | 1.10 |
| Prosus | 148.0 | 64.02 | 1.73 |
| Novo Nordisk B A/s | 124.4 | 121.10 | 0.48 |
| Lvmh | 123.3 | 714.70 | -0.60 |

| BIGGEST MOVERS | Close price | Day's change | Day's chng% |
|---|---|---|---|
| **Ups** | | | |
| Cs N | 3.07 | 0.09 | 2.85 |
| Prosus | 64.02 | 1.73 | 2.78 |
| Vestas Wind Systems A/s | 25.41 | 0.66 | 2.65 |
| Siemens Energy Ag Na O.n. | 16.61 | 0.38 | 2.34 |
| Novartis N | 86.86 | 1.68 | 1.97 |
| **Downs** | | | |
| Orange | 9.35 | -0.31 | -3.19 |
| Bayer Ag Na O.n. | 53.15 | -1.69 | -3.08 |
| Kering | 546.70 | -13.00 | -2.32 |
| Heineken | 89.40 | -2.10 | -2.30 |
| Vonovia Se Na O.n. | 23.70 | -0.52 | -2.15 |

Based on the constituents of the FTSEurofirst 300 Eurozone index

**TOKYO**

| ACTIVE STOCKS | stock traded m's | close price | Day's change |
|---|---|---|---|
| Fast Retailing Co., | 689.6 | 83890.00 | 2530.00 |
| Softbank . | 656.7 | 6068.00 | 13.00 |
| Eisai Co., | 630.7 | 10050.00 | 495.00 |
| Tokyo Electron | 500.8 | 46100.00 | -640.00 |
| Toyota Motor | 425.1 | 1951.00 | -20.00 |
| Mitsubishi Ufj Fin,. | 353.1 | 741.90 | 3.20 |
| Nippon Yusen Kabushiki Kaisha | 335.6 | 3005.00 | -36.00 |
| Sony | 308.9 | 11145.00 | -35.00 |
| Nintendo Co., | 284.5 | 5684.00 | -42.00 |
| Olympus | 269.2 | 2632.50 | -65.50 |

| BIGGEST MOVERS | Close price | Day's change | Day's chng% |
|---|---|---|---|
| **Ups** | | | |
| Eisai Co., | 10050.00 | 495.00 | 5.18 |
| Fast Retailing Co., | 83890.00 | 2530.00 | 3.11 |
| Yaskawa Electric | 4665.00 | 140.00 | 3.09 |
| Shiseido , | 6277.00 | 173.00 | 2.83 |
| Fanuc | 20860.00 | 555.00 | 2.73 |
| **Downs** | | | |
| T&d Holdings, . | 1531.00 | -50.00 | -3.16 |
| Oki Electric Industry , | 709.00 | -23.00 | -3.14 |
| Nikon | 1250.00 | -40.00 | -3.10 |
| Resona Holdings, . | 619.60 | -17.40 | -2.73 |
| Nissan Motor Co., | 461.70 | -12.90 | -2.72 |

Based on the constituents of the Nikkei 225 index

## UK MARKET WINNERS AND LOSERS

| FTSE 100 | Dec 05 price(p) | %Chg week | %Chg ytd |
|---|---|---|---|
| **Winners** | | | |
| Prudential | 1085.50 | 16.9 | - |
| Antofagasta | 1445.50 | 8.9 | 7.8 |
| Associated British Foods | 1668.50 | 5.9 | - |
| Rio Tinto | 5671.00 | 5.7 | 16.1 |
| Anglo American | 3337.00 | 5.2 | 10.6 |
| Ocado | 663.20 | 4.6 | - |
| Glencore | 561.60 | 4.3 | 49.2 |
| Endeavour Mining | 1750.00 | 3.8 | 8.0 |
| Jd Sports Fashion | 128.65 | 3.3 | - |
| Intermediate Capital | 1235.00 | 2.7 | -43.4 |
| Compass | 1896.00 | 2.7 | 15.0 |
| Next | 5854.00 | 2.6 | - |
| **Losers** | | | |
| Pearson | 938.20 | -5.3 | 55.0 |
| Sage | 789.80 | -3.2 | -7.5 |
| M&g | 186.80 | -3.1 | -6.9 |
| Entain | 1364.00 | -2.4 | - |
| Halma | 2218.00 | -2.3 | - |
| Bt | 120.95 | -2.3 | - |
| 3i | 1313.50 | -2.2 | - |
| Melrose Industries | 127.20 | -2.1 | -18.6 |
| London Stock Exchange | 7980.00 | -1.9 | 14.7 |
| Vodafone | 91.02 | -1.9 | - |
| Bunzl | 3021.00 | -1.9 | 2.9 |
| Rentokil Initial | 540.00 | -1.7 | -6.3 |

| FTSE 250 | Dec 05 price(p) | %Chg week | %Chg ytd |
|---|---|---|---|
| **Winners** | | | |
| Aston Martin Lagonda Global Holdings | 141.00 | 13.2 | -70.8 |
| Fidelity China Special Situations | 235.50 | 12.1 | - |
| Wizz Air Holdings | 2341.00 | 8.9 | - |
| Vinacapital Vietnam Opportunity Fund Ld | 459.00 | 8.8 | - |
| Puretech Health | 294.50 | 7.9 | -1.3 |
| Ferrexpo | 153.50 | 7.5 | - |
| Dr. Martens | 207.20 | 7.3 | -51.5 |
| Vietnam Enterprise Investments | 604.00 | 7.3 | - |
| 4imprint | 4245.00 | 6.9 | 51.1 |
| Rotork | 310.00 | 6.8 | - |
| Elementis | 113.90 | 6.5 | - |
| Fidelity Emerging Markets | 617.00 | 5.8 | - |
| **Losers** | | | |
| Auction Technology | 738.00 | -17.0 | - |
| Wood (john) | 133.50 | -16.2 | - |
| Petrofac | 84.05 | -10.1 | - |
| Home Reit | 50.10 | -9.7 | - |
| Synthomer | 130.00 | -8.3 | - |
| Currys | 74.85 | -7.8 | -33.1 |
| Savills | 851.00 | -6.5 | - |
| Ninety One | 189.70 | -5.7 | - |
| Spirent Communications | 271.00 | -5.3 | -2.0 |
| Octopus Renewables Infrastructure Trust | 98.60 | -5.0 | - |
| Energean | 1319.00 | -4.8 | 52.7 |
| Tullow Oil | 41.70 | -4.5 | -8.2 |

| FTSE SmallCap | Dec 05 price(p) | %Chg week | %Chg ytd |
|---|---|---|---|
| **Winners** | | | |
| Topps Tiles | 51.60 | 29.0 | - |
| Foresight Holdings | 410.00 | 15.5 | -1.7 |
| Newriver Reit | 83.30 | 13.3 | -5.2 |
| Baillie Gifford China Growth Trust | 267.50 | 12.8 | - |
| Chrysalis Investments | 76.10 | 12.7 | - |
| On The Beach | 129.40 | 12.3 | -53.0 |
| Record | 90.00 | 11.8 | 7.7 |
| Funding Circle Holdings | 61.00 | 11.7 | - |
| Jpmorgan China Growth & ome | 345.50 | 10.9 | - |
| Abrdn Equity ome Trust | 356.50 | 10.5 | -1.0 |
| Severfield | 65.10 | 9.6 | -4.5 |
| Up Global Sourcing Holdings | 149.25 | 9.3 | - |
| **Losers** | | | |
| Capital & Regional | 50.20 | -16.2 | -14.8 |
| Pod Point Holdings | 60.20 | -13.4 | -78.5 |
| Avon Protection | 1057.00 | -10.3 | -7.7 |
| Restaurant | 29.44 | -10.0 | - |
| Reach | 107.40 | -9.7 | - |
| Fuller, Smith & Turner | 536.00 | -9.2 | - |
| Greencore | 65.50 | -8.0 | - |
| Capita | 23.90 | -7.6 | - |
| Helical | 326.00 | -6.7 | -27.0 |
| Zotefoams | 295.00 | -6.6 | -27.6 |
| Pollen Street | 632.00 | -5.0 | - |
| Int Personal Finance | 75.10 | -4.9 | - |

| Industry Sectors | Dec 05 price(p) | %Chg week | %Chg ytd |
|---|---|---|---|
| **Winners** | | | |
| Life Insurance | 6946.65 | 7.2 | -9.0 |
| Automobiles & Parts | 1383.14 | 6.5 | - |
| Industrial Metals | 7861.08 | 5.4 | 23.9 |
| General Retailers | 3326.08 | 2.9 | 15.1 |
| Mining | 11028.64 | 2.8 | - |
| Food Producers | 5872.80 | 2.1 | - |
| Pharmaceuticals & Biotech. | 20891.01 | 2.0 | 11.4 |
| Electricity | 10595.57 | 1.9 | 4.8 |
| Banks | 3220.82 | 1.6 | 5.7 |
| Tobacco | 37061.56 | 1.4 | 26.5 |
| Personal Goods | 33053.74 | 1.4 | -7.6 |
| Health Care Equip.& Services | 10978.73 | 1.2 | 33.1 |
| **Losers** | | | |
| Mobile Telecommunications | 2311.88 | -1.7 | - |
| Industrial Transportation | 3663.95 | -1.7 | - |
| Software & Computer Services | 1881.42 | -1.2 | - |
| General Financial | 12672.86 | -1.1 | 10.2 |
| General Industrials | 6184.72 | -1.0 | - |
| Construction & Materials | 6833.30 | -1.0 | - |
| Electronic & Electrical Equip. | 9267.73 | -0.9 | - |
| Media | 9268.29 | -0.4 | -5.0 |
| Nonlife Insurance | 3191.69 | -0.2 | -3.0 |
| Chemicals | 12082.98 | -0.1 | - |
| Industrial Engineering | 14711.24 | 0.0 | - |
| Real Estate & Investment Servic | 2242.63 | 0.0 | - |

Based on last week's performance. †Price at suspension.

## CURRENCIES

| Dec 5 | Currency | DOLLAR Closing Mid | DOLLAR Day's Change | EURO Closing Mid | EURO Day's Change | POUND Closing Mid | POUND Day's Change |
|---|---|---|---|---|---|---|---|
| Argentina | Argentine Peso | 169.1218 | 1.0147 | 178.0436 | 1.9765 | 206.6417 | 1.2825 |
| Australia | Australian Dollar | 1.4816 | 0.0051 | 1.5597 | 0.0134 | 1.8103 | 0.0067 |
| Bahrain | Bahrainin Dinar | 0.3770 | - | 0.3969 | 0.0020 | 0.4606 | 0.0001 |
| Bolivia | Bolivian Boliviano | 6.9100 | - | 7.2745 | 0.0373 | 8.4430 | 0.0018 |
| Brazil | Brazilian Real | 5.2570 | 0.0232 | 5.5343 | 0.0526 | 6.4232 | 0.0296 |
| Canada | Canadian Dollar | 1.3519 | 0.0039 | 1.4232 | 0.0114 | 1.6518 | 0.0052 |
| Chile | Chilean Peso | 887.8350 | 5.3850 | 934.6714 | 10.4368 | 1084.8027 | 6.8037 |
| China | Chinese Yuan | 6.9578 | -0.0807 | 7.3248 | -0.0469 | 8.5013 | -0.0968 |
| Colombia | Colombian Peso | 4813.8600 | 47.6200 | 5067.8098 | 75.8843 | 5881.8236 | 59.3937 |
| Costa Rica | Costa Rican Colon | 605.4850 | 1.8900 | 637.4265 | 5.2508 | 739.8129 | 2.4624 |
| Czech Republic | Czech Koruna | 23.1109 | -0.1726 | 24.3301 | -0.0559 | 28.2381 | -0.2050 |
| Denmark | Danish Krone | 7.0644 | -0.0367 | 7.4371 | -0.0002 | 8.6316 | -0.0430 |
| Egypt | Egyptian Pound | 24.5588 | 0.0287 | 25.8544 | 0.1627 | 30.0072 | 0.0413 |
| Hong Kong | Hong Kong Dollar | 7.7680 | -0.0157 | 8.1778 | 0.0256 | 9.4913 | -0.0171 |
| Hungary | Hungarian Forint | 390.5961 | -0.6294 | 411.2014 | 1.4511 | 477.2505 | -0.6698 |
| India | Indian Rupee | 81.7975 | 0.4787 | 86.1126 | 0.9434 | 99.9444 | 0.6056 |
| Indonesia | Indonesian Rupiah | 15467.5000 | 40.0000 | 16283.4890 | 125.4766 | 18899.0188 | 52.7852 |
| Israel | Israeli Shekel | 3.4014 | -0.0066 | 3.5808 | 0.0115 | 4.1559 | -0.0072 |
| Japan | Japanese Yen | 136.2900 | 0.8150 | 143.4798 | 1.5899 | 166.5262 | 1.0302 |
| ..One Month | | 136.2894 | 0.8138 | 143.4795 | 1.5895 | 166.5256 | 1.0291 |
| ..Three Month | | 136.2883 | 0.8117 | 143.4790 | 1.5884 | 166.5246 | 1.0270 |
| ..One Year | | 136.2831 | 0.8013 | 143.4759 | 1.5822 | 166.5256 | 1.0223 |
| Kenya | Kenyan Shilling | 122.7000 | 0.2500 | 129.1729 | 0.9248 | 149.9212 | 0.3365 |
| Kuwait | Kuwaiti Dinar | 0.3071 | 0.0001 | 0.3232 | 0.0018 | 0.3752 | 0.0002 |
| Malaysia | Malaysian Ringgit | 4.3690 | -0.0190 | 4.5995 | 0.0037 | 5.3383 | -0.0221 |
| Mexico | Mexican Peso | 19.7540 | 0.3855 | 20.7961 | 0.5105 | 24.1365 | 0.4759 |
| New Zealand | New Zealand Dollar | 1.5789 | 0.0095 | 1.6622 | 0.0185 | 1.9292 | 0.0121 |
| Nigeria | Nigerian Naira | 443.5000 | -0.2500 | 466.8962 | 2.1343 | 541.8912 | -0.1929 |
| Norway | Norwegian Krone | 9.8795 | 0.0421 | 10.4007 | 0.0974 | 12.0713 | 0.0539 |
| Pakistan | Pakistani Rupee | 223.6250 | -0.1250 | 235.4220 | 1.0773 | 273.2366 | -0.0960 |
| Peru | Peruvian Nuevo Sol | 3.8356 | 0.0007 | 4.0379 | 0.0214 | 4.6865 | 0.0018 |
| Philippines | Philippine Peso | 56.0400 | 0.3100 | 58.9963 | 0.6274 | 68.4726 | 0.3929 |
| Poland | Polish Zloty | 4.4728 | 0.0027 | 4.7088 | 0.0270 | 5.4651 | 0.0044 |
| Romania | Romanian Leu | 4.6711 | -0.0295 | 4.9175 | -0.0057 | 5.7073 | -0.0349 |
| Russia | Russian Ruble | 62.7250 | 0.1000 | 66.0340 | 0.4436 | 76.6406 | 0.1381 |
| Saudi Arabia | Saudi Riyal | 3.7590 | - | 3.9573 | 0.0203 | 4.5929 | 0.0010 |
| Singapore | Singapore Dollar | 1.3535 | -0.0019 | 1.4249 | 0.0054 | 1.6538 | -0.0019 |
| South Africa | South African Rand | 17.3425 | -0.1819 | 18.2574 | -0.0968 | 21.1900 | -0.2178 |
| South Korea | South Korean Won | 1292.6500 | -7.3500 | 1360.8419 | -0.7141 | 1579.4265 | -8.6507 |
| Sweden | Swedish Krona | 10.3591 | -0.0451 | 10.9055 | 0.0087 | 12.6572 | -0.0525 |
| Switzerland | Swiss Franc | 0.9383 | -0.0028 | 0.9877 | 0.0021 | 1.1464 | -0.0032 |
| Taiwan | New Taiwan Dollar | 30.4480 | -0.1490 | 32.0542 | 0.0084 | 37.2029 | -0.1743 |
| Thailand | Thai Baht | 34.7650 | - | 36.5990 | 0.1878 | 42.4777 | 0.0088 |
| Tunisia | Tunisian Dinar | 3.2005 | -0.0084 | 3.3693 | 0.0085 | 3.9105 | -0.0094 |
| Turkey | Turkish Lira | 18.6380 | - | 19.6212 | 0.1007 | 22.7729 | 0.0047 |
| United Arab Emirates | UAE Dirham | 3.6730 | - | 3.8668 | 0.0198 | 4.4879 | 0.0009 |
| United Kingdom | Pound Sterling | 0.8184 | -0.0002 | 0.8616 | 0.0042 | - | - |
| ..One Month | | 0.8186 | -0.0002 | 0.8615 | 0.0042 | - | - |
| ..Three Month | | 0.8188 | -0.0002 | 0.8612 | 0.0042 | - | - |
| ..One Year | | 0.8193 | -0.0002 | 0.8601 | 0.0042 | - | - |
| United States | United States Dollar | - | - | 1.0528 | 0.0054 | 1.2219 | 0.0003 |
| ..One Month | | - | - | 1.0524 | -0.1689 | 1.2220 | 0.0003 |
| ..Three Month | | - | - | 1.0520 | -0.1688 | 1.2222 | 0.0002 |
| ..One Year | | - | - | 1.0501 | -0.1689 | 1.2227 | 0.0003 |
| Vietnam | Vietnamese Dong | 23975.0000 | -395.0000 | 25239.7779 | -284.1648 | 29293.8998 | -476.5108 |
| European Union | Euro | 0.9499 | -0.0049 | - | - | 1.1606 | -0.0057 |
| ..One Month | | 0.9496 | -0.0049 | - | - | 1.1605 | -0.0058 |
| ..Three Month | | 0.9492 | -0.0049 | - | - | 1.1603 | -0.0057 |
| ..One Year | | 0.9473 | -0.0049 | - | - | 1.1591 | -0.0058 |

Rates are derived from WM Reuters Spot Rates and MorningStar (latest rates at time of production). Some values are rounded. Currency redenominated by 1000. The exchange rates printed in this table are also available at www.FT.com/marketsdata

## FTSE ACTUARIES SHARE INDICES

UK SERIES www.ft.com/equities

Produced in conjunction with the Institute and Faculty of Actuaries

| | £ Strlg Dec 05 | Day's chge% | Euro Index | £ Strlg Dec 02 | £ Strlg Dec 01 | Year ago | Div yield% | Cover | P/E ratio | X/D adj | Total Return |
|---|---|---|---|---|---|---|---|---|---|---|---|
| FTSE 100 (100) | 7567.54 | 0.15 | 6839.68 | 7556.23 | 7558.49 | 7122.32 | 3.60 | 1.62 | 17.12 | 265.96 | 7769.11 |
| FTSE 250 (250) | 19329.58 | -0.17 | 17470.42 | 19363.28 | 19409.42 | 22646.08 | 3.11 | 0.67 | 47.64 | 528.99 | 16073.89 |
| FTSE 250 ex Inv Co (173) | 19833.11 | -0.38 | 17925.52 | 19908.32 | 19883.39 | 23407.58 | 3.21 | 1.28 | 24.37 | 559.37 | 16827.29 |
| FTSE 350 (350) | 4183.53 | 0.10 | 3781.15 | 4179.26 | 4181.79 | 4078.56 | 3.53 | 1.50 | 18.90 | 142.20 | 8522.34 |
| FTSE 350 ex Investment Trusts (270) | 4121.93 | 0.10 | 3725.47 | 4117.79 | 4118.08 | 3971.60 | 3.58 | 1.68 | 16.65 | 142.45 | 4339.65 |
| FTSE 350 Higher Yield (132) | 3584.59 | 0.28 | 3239.82 | 3574.46 | 3580.59 | 3224.16 | 4.98 | 1.72 | 11.66 | 163.64 | 8238.97 |
| FTSE 350 Lower Yield (218) | 4360.15 | -0.08 | 3940.78 | 4363.83 | 4361.49 | 4689.67 | 2.03 | 0.94 | 52.62 | 91.51 | 5368.07 |
| FTSE SmallCap (236) | 6284.80 | 0.27 | 5680.31 | 6267.83 | 6254.95 | 7231.10 | 3.39 | 0.04 | 698.87 | 202.11 | 10567.73 |
| FTSE SmallCap ex Inv Co (126) | 5028.71 | 0.14 | 4545.03 | 5021.54 | 5007.28 | 5992.90 | 3.56 | 2.37 | 11.86 | 155.17 | 8789.10 |
| FTSE All-Share (586) | 4143.21 | 0.11 | 3744.70 | 4138.81 | 4141.04 | 4059.32 | 3.52 | 1.47 | 19.37 | 140.60 | 8522.95 |
| FTSE All-Share ex Inv Co (396) | 4046.90 | 0.10 | 3657.66 | 4042.81 | 4042.93 | 3912.33 | 3.58 | 1.69 | 16.56 | 139.65 | 4325.86 |
| FTSE All-Share ex Multinationals (523) | 1087.59 | -0.20 | 816.25 | 1089.75 | 1090.11 | 1304.00 | 3.90 | 0.86 | 29.75 | 39.94 | 2316.39 |
| FTSE Fledgling (81) | 11594.25 | -0.06 | 10479.09 | 11601.79 | 11588.23 | 13100.65 | 3.79 | 4.14 | 6.37 | 357.38 | 25123.29 |
| FTSE Fledgling ex Inv Co (31) | 15017.27 | -0.62 | 13572.87 | 15111.23 | 15053.20 | 17193.59 | 3.57 | 7.64 | 3.66 | 448.06 | 31571.67 |
| FTSE All-Small (317) | 4380.58 | 0.25 | 3959.24 | 4369.54 | 4360.77 | 5035.31 | 3.42 | 0.29 | 101.61 | 140.60 | 9447.64 |
| FTSE All-Small ex Inv Co (157) | 3781.89 | 0.12 | 3418.14 | 3777.52 | 3766.66 | 4500.35 | 3.56 | 2.55 | 10.99 | 116.58 | 8371.16 |
| FTSE AIM All-Share (756) | 850.72 | -0.31 | 768.89 | 853.32 | 850.56 | 1182.30 | 1.62 | 1.74 | 35.33 | 13.06 | 999.82 |
| FTSE All-Share Technology (21) | 2014.03 | -0.85 | 1691.46 | 2031.35 | 2041.56 | 2289.99 | 1.90 | 0.89 | 58.93 | 39.63 | 2917.26 |
| FTSE All-Share Telecommunications (6) | 1504.67 | -0.03 | 1263.68 | 1505.14 | 1513.40 | 1827.06 | 7.05 | 1.03 | 13.80 | 99.22 | 2300.74 |
| FTSE All-Share Health Care (14) | 14558.38 | 0.48 | 12226.68 | 14489.40 | 14484.59 | 12513.19 | 2.58 | 1.05 | 36.95 | 374.42 | 13483.88 |
| FTSE All-Share Financials (254) | 4571.60 | -0.01 | 3839.41 | 4571.89 | 4574.77 | 4773.91 | 3.69 | 0.99 | 27.37 | 164.19 | 5085.84 |
| FTSE All-Share Real Estate (55) | 846.75 | 0.20 | 743.93 | 845.06 | 836.43 | 1198.48 | 4.14 | 3.68 | 6.56 | 32.85 | 892.21 |
| FTSE All-Share Consumer Discretionary (84) | 4628.72 | -0.28 | 3887.38 | 4641.90 | 4630.30 | 5231.10 | 2.36 | 1.18 | 36.04 | 107.00 | 4909.20 |
| FTSE All-Share Consumer Staples (24) | 19967.77 | -0.08 | 16769.69 | 19982.86 | 19941.85 | 19049.45 | 3.82 | 1.13 | 23.08 | 692.67 | 18309.51 |
| FTSE All-Share Industrials (83) | 6352.64 | -0.35 | 5335.19 | 6374.98 | 6364.95 | 7168.97 | 2.26 | 1.30 | 34.12 | 135.51 | 7354.23 |
| FTSE All-Share Basic Materials (22) | 9373.02 | 0.87 | 7871.82 | 9292.32 | 9281.23 | 7742.57 | 5.80 | 2.00 | 8.62 | 537.40 | 12775.69 |
| FTSE All-Share Energy (13) | 8569.51 | 0.42 | 7197.00 | 8534.07 | 8629.43 | 6051.01 | 3.51 | 2.74 | 10.39 | 302.44 | 10426.62 |
| FTSE All-Share Utilities (10) | 8696.89 | 0.52 | 7303.98 | 8651.73 | 8684.66 | 8372.19 | 4.42 | 0.57 | 39.53 | 373.12 | 13260.58 |
| FTSE All-Share Software and Computer Services (18) | 2170.01 | -0.91 | 1822.46 | 2189.86 | 2200.16 | 2461.49 | 1.91 | 0.88 | 59.37 | 43.04 | 3325.73 |
| FTSE All-Share Technology Hardware and Equipment (3) | 5294.69 | 0.48 | 4446.68 | 5269.55 | 5338.78 | 6463.79 | 1.68 | 1.19 | 49.97 | 78.21 | 6842.95 |
| FTSE All-Share Telecommunications Equipment (1) | 605.79 | -1.31 | 508.77 | 613.84 | 634.85 | 630.00 | 2.03 | 2.31 | 21.35 | 11.51 | 865.92 |
| FTSE All-Share Telecommunications Service Providers (5) | 2308.38 | 0.03 | 1938.67 | 2307.71 | 2317.24 | 2819.19 | 7.28 | 1.01 | 13.58 | 157.08 | 3217.07 |
| FTSE All-Share Health Care Providers (3) | 11107.18 | 0.21 | 9328.23 | 11084.41 | 11143.00 | 7981.51 | 0.52 | 4.88 | 39.03 | 58.27 | 10309.26 |
| FTSE All-Share Medical Equipment and Services (2) | 5490.27 | -0.34 | 4610.94 | 5509.14 | 5466.63 | 5744.07 | 2.60 | 0.97 | 39.84 | 142.76 | 5303.40 |
| FTSE All-Share Pharmaceuticals and Biotechnology (9) | 20831.93 | 0.52 | 17495.45 | 20723.53 | 20723.58 | 17732.69 | 2.60 | 1.04 | 36.78 | 539.80 | 17373.62 |
| FTSE All-Share Banks (12) | 3177.91 | -0.04 | 2668.93 | 3179.28 | 3168.93 | 2909.96 | 4.09 | 2.61 | 9.37 | 128.47 | 2812.31 |
| FTSE All-Share Finance and Credit Services (8) | 10878.26 | -3.18 | 9135.97 | 11235.02 | 11232.80 | 9409.02 | 1.92 | 2.05 | 25.42 | 208.86 | 14616.52 |
| FTSE All-Share Investment Banking and Brokerage Services (31) | 8581.90 | -1.07 | 7207.41 | 8674.35 | 8664.68 | 10264.65 | 5.20 | 1.51 | 12.73 | 424.98 | 12105.11 |
| FTSE All-Share Closed End Investments (190) | 11834.43 | 0.18 | 9939.01 | 11812.75 | 11908.70 | 14013.16 | 2.65 | -2.99 | -12.63 | 296.90 | 7413.27 |
| FTSE All-Share Life Insurance (6) | 7069.00 | 2.42 | 5936.82 | 6902.19 | 6857.32 | 7641.78 | 4.33 | 1.08 | 21.34 | 294.59 | 8650.67 |
| FTSE All-Share Nonlife Insurance (7) | 3592.83 | 0.07 | 3017.39 | 3590.33 | 3629.65 | 3541.23 | 3.99 | 1.24 | 20.25 | 130.27 | 7651.43 |
| FTSE All-Share Real Estate Investment and Services (10) | 2136.33 | -1.09 | 1794.17 | 2159.96 | 2155.35 | 2987.41 | 2.36 | 4.11 | 10.32 | 41.03 | 6370.16 |
| FTSE All-Share Real Estate Investment Trusts (45) | 2105.13 | 0.44 | 1767.97 | 2095.96 | 2071.43 | 2980.26 | 4.46 | 3.64 | 6.16 | 89.90 | 3198.23 |
| FTSE All-Share Automobiles and Parts (2) | 1390.22 | 0.46 | 1167.56 | 1383.91 | 1361.51 | 3519.89 | 0.70 | -53.35 | -2.68 | 14.02 | 1446.31 |
| FTSE All-Share Consumer Services (2) | 3121.83 | 1.12 | 2621.83 | 3087.38 | 3073.39 | 2507.69 | 1.23 | 2.58 | 31.62 | 38.43 | 3960.04 |
| FTSE All-Share Household Goods and Home Construction (12) | 8468.55 | -0.70 | 7112.21 | 8528.22 | 8521.76 | 14326.24 | 8.85 | 1.59 | 7.10 | 710.24 | 7620.40 |
| FTSE All-Share Leisure Goods (2) | 20311.72 | 1.44 | 17058.56 | 20023.54 | 20069.20 | 23719.18 | 3.33 | 1.59 | 18.86 | 831.45 | 22699.97 |
| FTSE All-Share Personal Goods (4) | 28422.84 | -2.18 | 23870.58 | 29055.56 | 29066.19 | 30023.74 | 1.82 | 2.94 | 18.70 | 402.68 | 22231.07 |
| FTSE All-Share Media (11) | 9516.82 | -0.59 | 7992.58 | 9572.96 | 9543.98 | 9630.44 | 2.33 | 1.47 | 29.29 | 221.42 | 6696.05 |
| FTSE All-Share Retailers (22) | 1943.41 | 0.01 | 1632.15 | 1943.15 | 1930.03 | 2764.91 | 2.82 | 3.32 | 10.68 | 54.10 | 2535.94 |
| FTSE All-Share Travel and Leisure (29) | 6434.69 | -0.40 | 5404.10 | 6460.43 | 6461.89 | 6955.20 | 0.64 | -8.42 | -18.71 | 40.81 | 6655.37 |
| FTSE All-Share Beverages (5) | 29224.62 | -0.65 | 24543.95 | 29416.73 | 29398.97 | 29728.72 | 2.05 | 2.00 | 24.36 | 584.47 | 23421.12 |
| FTSE All-Share Food Producers (10) | 6059.09 | -0.15 | 5088.65 | 6068.18 | 5908.01 | 6677.72 | 2.28 | 2.55 | 17.23 | 98.17 | 5848.20 |
| FTSE All-Share Tobacco (2) | 37061.62 | 0.61 | 31125.76 | 36836.04 | 36711.97 | 27792.92 | 6.40 | 0.87 | 17.99 | 1906.82 | 34808.96 |
| FTSE All-Share Construction and Materials (15) | 7256.95 | -0.31 | 6094.67 | 7279.82 | 7275.84 | 8523.66 | 3.18 | 0.64 | 48.78 | 230.56 | 8854.94 |
| FTSE All-Share Aerospace and Defense (7) | 5181.33 | 0.34 | 4351.48 | 5163.78 | 5137.47 | 4401.71 | 2.27 | 0.11 | 399.51 | 104.10 | 6319.62 |
| FTSE All-Share Electronic and Electrical Equipment (10) | 10881.50 | -0.67 | 9138.70 | 10955.40 | 10873.88 | 13716.63 | 1.61 | 2.11 | 29.35 | 160.27 | 10761.10 |
| FTSE All-Share General Industrials (8) | 4976.12 | -0.73 | 4179.13 | 5012.83 | 4995.32 | 5444.54 | 2.87 | 1.16 | 29.96 | 142.00 | 6572.64 |
| FTSE All-Share Industrial Engineering (5) | 16253.72 | -0.20 | 13650.49 | 16287.08 | 16255.77 | 19800.95 | 1.61 | 2.01 | 30.95 | 261.52 | 21833.14 |
| FTSE All-Share Industrial Support Services (30) | 10024.99 | -0.58 | 8419.37 | 10083.55 | 10061.11 | 11876.32 | 1.91 | 1.67 | 31.28 | 194.51 | 11544.07 |
| FTSE All-Share Industrial Transportation (8) | 5528.31 | 0.10 | 4642.88 | 5522.84 | 5590.73 | 6959.11 | 2.11 | 2.79 | 16.95 | 99.15 | 5793.28 |
| FTSE All-Share Industrial Materials (1) | 14752.75 | -4.38 | 470.69 | 15427.88 | 15627.92 | 21654.04 | 2.23 | 1.81 | 24.80 | 329.06 | 18634.93 |
| FTSE All-Share Industrial Metals and Mining (9) | 8464.76 | 1.07 | 7109.02 | 8375.14 | 8370.22 | 6379.74 | 6.17 | 2.01 | 8.06 | 517.75 | 12993.91 |
| FTSE All-Share Precious Metals and Mining (5) | 10419.24 | -0.24 | 8750.47 | 10444.64 | 10476.56 | 19142.80 | 3.43 | 1.83 | 15.94 | 358.99 | 7345.92 |
| FTSE All-Share Chemicals (7) | 13355.62 | -0.83 | 11216.56 | 13467.30 | 13340.30 | 18112.82 | 2.66 | 1.79 | 20.94 | 324.25 | 13385.61 |
| FTSE All-Share Oil. Gas and Coal (12) | 8319.11 | 0.42 | 6986.71 | 8284.71 | 8377.25 | 5872.44 | 3.51 | 2.74 | 10.39 | 293.60 | 10497.36 |
| **FTSE Sector Indices** | | | | | | | | | | | |
| **Non Financials (332)** | **5078.32** | **0.14** | **4589.88** | **5071.32** | **5073.92** | **4883.84** | **3.47** | **1.61** | **17.89** | **169.57** | **9191.94** |

| Hourly movements | 8.00 | 9.00 | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 | 15.00 | 16.00 | High/day | Low/day |
|---|---|---|---|---|---|---|---|---|---|---|---|
| FTSE 100 | 7532.78 | 7525.69 | 7538.10 | 7544.94 | 7544.65 | 7544.45 | 7536.95 | 7566.66 | 7560.96 | 7570.35 | 7508.27 |
| FTSE 250 | 19412.69 | 19468.55 | 19465.84 | 19492.49 | 19518.44 | 19494.76 | 19421.92 | 19437.93 | 19390.65 | 19536.08 | 19259.83 |
| FTSE SmallCap | 6253.36 | 6257.99 | 6263.91 | 6266.54 | 6271.98 | 6270.40 | 6258.69 | 6268.18 | 6269.56 | 6274.77 | 6248.06 |
| FTSE All-Share | 4129.40 | 4127.96 | 4133.63 | 4137.60 | 4138.36 | 4137.51 | 4131.67 | 4145.85 | 4141.83 | 4147.58 | 4116.08 |

Time of FTSE 100 Day's high:15:01:45 Day's Low13:33:30 FTSE 100 2010/11 High: 7672.40(10/02/2022) Low: 6826.15(12/10/2022)
Time of FTSE All-Share Day's high:15:02:00 Day's Low13:33:00 FTSE 100 2010/11 High: 4296.96(10/02/2022) Low: 3712.50(12/10/2022)

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## FT 30 INDEX

| | Dec 05 | Dec 02 | Dec 01 | Nov 30 | Nov 29 | Yr Ago | High | Low |
|---|---|---|---|---|---|---|---|---|
| FT 30 | 2525.10 | 2532.00 | 2523.10 | 2514.90 | 2507.60 | 0.00 | 2880.10 | 2152.10 |
| FT 30 Div Yield | - | - | - | - | - | 0.00 | 3.93 | 2.74 |
| P/E Ratio net | - | - | - | - | - | 0.00 | 19.44 | 14.26 |

**FT 30 hourly changes**

| 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | High | Low |
|---|---|---|---|---|---|---|---|---|---|---|
| 2532 | 2536 | 2534.7 | 2537.1 | 2536.8 | 2533.5 | 2532.2 | 2531.3 | 2532.2 | 2539.3 | 2525.1 |

FT30 constituents and recent additions/deletions can be found at www.ft.com/ft30

## FT WILSHIRE 5000 INDEX SERIES

| | Dec 02 | | Dec 02 |
|---|---|---|---|
| FT Wilshire 5000 | 41322.74 | FT Wilshire Mid Cap | 5620.53 |
| FT Wilshire 2500 | 5291.39 | FT Wilshire Small Cap | 5068.63 |
| FT Wilshire Mega Cap | 5259.35 | FT Wilshire Micro Cap | 4912.00 |
| FT Wilshire Large Cap | 5319.47 | | |

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## FTSE SECTORS: LEADERS & LAGGARDS

Year to date percentage changes

| | | | | | |
|---|---|---|---|---|---|
| Oil & Gas Producers | 45.23 | Gas Water & Multi | -1.86 | FTSE 250 Index | -17.68 |
| Oil & Gas | 44.48 | Health Care Eq & Srv | -3.42 | Mobile Telecomms | -18.91 |
| Tobacco | 26.54 | Beverages | -6.37 | Construct & Material | -19.58 |
| Mining | 22.89 | Travel & Leisure | -6.69 | Telecommunications | -19.67 |
| Aerospace & Defense | 17.30 | Media | -7.44 | Leisure Goods | -20.00 |
| Basic Materials | 14.16 | Nonlife Insurance | -8.90 | Industrial Eng | -20.03 |
| Pharmace & Biotech | 11.36 | Software & Comp Serv | -8.92 | Oil Equipment & Serv | -20.58 |
| Health Care | 10.35 | Technology | -9.11 | Fixed Line Telecomms | -21.90 |
| Banks | 5.59 | Life Insurance | -9.13 | Household Goods & Ho | -24.56 |
| Electricity | 5.03 | Financials | -10.61 | Electronic & Elec Eq | -26.22 |
| Personal Goods | 4.27 | Tech Hardware & Eq | -10.71 | Chemicals | -27.54 |
| FTSE 100 Index | 2.48 | Financial Services | -11.94 | Food & Drug Retailer | -29.76 |
| NON FINANCIALS Index | 0.13 | Food Producers | -12.36 | General Retailers | -30.00 |
| Beverages | 31.66 | Industrials | -14.20 | Real Est Invest & Tr | -31.90 |
| Utilities | -0.13 | Consumer Services | -14.64 | Real Est Invest & Se | -32.36 |
| Consumer Goods | -1.24 | FTSE SmallCap Index | -15.75 | Industrial Transport | -40.79 |
| FTSE All{HY-}Share Index | -1.54 | Equity Invest Instr | -17.00 | Automobiles & Parts | -61.87 |
| | | Support Services | -17.22 | Industrial Metals & | -78.41 |

## FTSE GLOBAL EQUITY INDEX SERIES

| Dec 5 Regions & countries | No of stocks | US $ indices | Day % | Mth % | YTD % | Total retn | YTD % | Gr Div Yield |
|---|---|---|---|---|---|---|---|---|
| FTSE Global All Cap | 9513 | 711.31 | -0.3 | 9.5 | -16.0 | 1140.41 | -14.2 | 2.3 |
| FTSE Global All Cap | 9513 | 711.31 | -0.3 | 9.5 | -16.0 | 1140.41 | -14.2 | 2.3 |
| FTSE Global Large Cap | 1906 | 635.66 | -0.3 | 9.5 | -16.3 | 1050.55 | -14.5 | 2.3 |
| FTSE Global Mid Cap | 2260 | 921.43 | -0.2 | 9.7 | -14.1 | 1389.59 | -12.3 | 2.2 |
| FTSE Global Small Cap | 5347 | 948.61 | 0.1 | 8.7 | -17.1 | 1367.69 | -15.6 | 2.1 |
| FTSE All-World | 4166 | 417.91 | -0.3 | 9.6 | -15.9 | 709.58 | -14.1 | 2.3 |
| FTSE World | 2662 | 758.81 | -0.3 | 9.5 | -15.5 | 1728.97 | -13.7 | 2.3 |
| FTSE Global All Cap ex UNITED KINGDOM In | 9223 | 750.92 | -0.3 | 9.3 | -16.3 | 1180.77 | -14.5 | 2.2 |
| FTSE Global All Cap ex USA | 7703 | 499.67 | -0.5 | 11.5 | -16.7 | 888.83 | -14.1 | 3.3 |
| FTSE Global All Cap ex JAPAN | 8108 | 743.04 | -0.2 | 9.5 | -16.0 | 1201.85 | -14.2 | 2.2 |
| FTSE Global All Cap ex Eurozone | 8851 | 753.24 | -0.3 | 9.0 | -15.8 | 1181.34 | -14.1 | 2.2 |
| FTSE Developed | 2178 | 696.76 | -0.3 | 9.4 | -15.6 | 1124.57 | -13.9 | 2.1 |
| FTSE Developed All Cap | 5827 | 726.29 | -0.3 | 9.3 | -15.7 | 1154.90 | -14.0 | 2.1 |
| FTSE Developed Large Cap | 834 | 652.63 | -0.4 | 9.3 | -15.8 | 1072.16 | -14.1 | 2.1 |
| FTSE Developed Europe Large Cap | 219 | 387.57 | -0.4 | 13.6 | -13.8 | 768.36 | -11.0 | 3.1 |
| FTSE Developed Europe Mid Cap | 354 | 580.21 | 0.0 | 14.7 | -24.8 | 998.35 | -22.6 | 3.0 |
| FTSE Dev Europe Small Cap | 746 | 818.25 | 0.0 | 13.8 | -25.9 | 1351.95 | -23.8 | 3.1 |
| FTSE North America Large Cap | 234 | 872.86 | -0.2 | 8.0 | -16.3 | 1312.15 | -15.0 | 1.7 |
| FTSE North America Mid Cap | 422 | 1155.71 | -0.1 | 8.9 | -11.6 | 1606.26 | -10.1 | 1.8 |
| FTSE North America Small Cap | 1334 | 1133.82 | 0.2 | 7.5 | -14.1 | 1510.66 | -12.9 | 1.6 |
| FTSE North America | 656 | 573.00 | -0.2 | 8.2 | -15.4 | 880.60 | -14.1 | 1.7 |
| FTSE Developed ex North America | 1522 | 265.41 | -0.7 | 12.3 | -15.8 | 508.40 | -13.3 | 3.1 |
| FTSE Japan Large Cap | 169 | 376.11 | -1.3 | 9.4 | -17.5 | 552.93 | -15.4 | 2.5 |
| FTSE Japan Mid Cap | 340 | 525.48 | -1.2 | 8.9 | -14.4 | 733.76 | -12.2 | 2.6 |
| FTSE Global wi JAPAN Small Cap | 896 | 584.42 | -1.3 | 8.9 | -16.0 | 847.44 | -13.7 | 2.8 |
| FTSE Japan | 509 | 154.59 | -1.3 | 9.3 | -16.9 | 254.48 | -14.8 | 2.6 |
| FTSE Asia Pacific Large Cap ex Japan | 1088 | 681.03 | -0.7 | 14.1 | -18.3 | 1241.98 | -15.9 | 3.2 |
| FTSE Asia Pacific Mid Cap ex Japan | 866 | 975.63 | -0.1 | 12.3 | -13.9 | 1715.14 | -11.3 | 3.4 |
| FTSE Asia Pacific Small Cap ex Japan | 2114 | 551.36 | 0.1 | 11.8 | -24.3 | 941.39 | -22.2 | 3.1 |
| FTSE Asia Pacific Ex Japan | 1954 | 542.79 | -0.6 | 13.9 | -17.9 | 1052.01 | -15.5 | 3.2 |
| FTSE Emerging All Cap | 3686 | 714.84 | -0.1 | 10.7 | -18.8 | 1247.42 | -16.1 | 3.7 |
| FTSE Emerging Large Cap | 1072 | 658.99 | -0.2 | 11.4 | -19.9 | 1156.65 | -17.2 | 3.8 |
| FTSE Emerging Mid Cap | 916 | 1035.41 | 0.3 | 7.5 | -9.9 | 1817.19 | -6.7 | 3.9 |
| FTSE Emerging Small Cap | 1698 | 775.37 | 0.5 | 9.0 | -20.0 | 1294.04 | -17.3 | 3.4 |
| FTSE Emerging Europe | 111 | 119.65 | -1.7 | 15.4 | -71.1 | 250.75 | -69.9 | 3.0 |
| FTSE Latin America All Cap | 262 | 726.48 | -0.4 | -4.3 | 2.5 | 1439.13 | 11.4 | 11.5 |
| FTSE Middle East and Africa All Cap | 329 | 747.07 | -0.1 | 0.5 | -6.2 | 1369.07 | -3.4 | 3.3 |
| FTSE Global wi UNITED KINGDOM All Cap In | 290 | 323.69 | -0.4 | 12.8 | -10.0 | 662.47 | -6.8 | 3.6 |
| FTSE Global wi USA All Cap | 1810 | 984.25 | -0.1 | 8.2 | -15.6 | 1426.15 | -14.3 | 1.6 |
| FTSE Europe All Cap | 1459 | 438.66 | -0.3 | 13.8 | -18.1 | 834.85 | -15.5 | 3.1 |
| FTSE Eurozone All Cap | 662 | 423.64 | -0.1 | 15.5 | -18.3 | 800.10 | -15.8 | 3.1 |
| FTSE EDHEC-Risk Efficient All-World | 4166 | 479.05 | -0.2 | 9.1 | -12.3 | 754.88 | -10.2 | 2.6 |
| FTSE EDHEC-Risk Efficient Developed Europe | 573 | 320.11 | -0.1 | 14.3 | -22.5 | 563.31 | -20.2 | 3.2 |
| Oil & Gas | 130 | 420.45 | -0.6 | 2.7 | 28.3 | 863.50 | 34.5 | 4.5 |
| Oil & Gas Producers | 86 | 417.34 | -0.9 | 1.6 | 31.4 | 880.78 | 38.3 | 4.8 |

| Dec 5 Sectors | No of stocks | US $ indices | Day % | Mth % | YTD % | Total retn | YTD % | Gr Div Yield |
|---|---|---|---|---|---|---|---|---|
| Oil Equipment & Services | 24 | 289.07 | 0.0 | 4.9 | 23.5 | 535.72 | 28.4 | 4.1 |
| Basic Materials | 393 | 620.70 | -0.2 | 15.4 | -7.7 | 1143.99 | -3.7 | 4.7 |
| Chemicals | 196 | 822.39 | 0.2 | 11.7 | -15.1 | 1455.83 | -12.7 | 3.0 |
| Forestry & Paper | 20 | 260.01 | -0.5 | 8.7 | -14.8 | 524.97 | -12.0 | 3.8 |
| Industrial Metals & Mining | 98 | 512.78 | 0.1 | 18.5 | -7.3 | 983.18 | -2.3 | 7.3 |
| Mining | 79 | 992.73 | -1.0 | 20.4 | 6.7 | 1937.09 | 13.3 | 5.8 |
| Industrials | 802 | 508.79 | -0.1 | 11.0 | -15.3 | 812.17 | -13.6 | 2.0 |
| Construction & Materials | 154 | 581.56 | -0.2 | 12.1 | -21.3 | 979.65 | -19.6 | 2.2 |
| Aerospace & Defense | 35 | 906.87 | 1.7 | 7.1 | 12.9 | 1416.92 | 14.7 | 1.5 |
| General Industrials | 76 | 244.50 | 0.2 | 11.7 | -11.9 | 432.52 | -9.6 | 2.5 |
| Electronic & Electrical Equipment | 157 | 642.11 | -0.3 | 12.3 | -20.1 | 923.01 | -18.9 | 1.5 |
| Industrial Engineering | 158 | 1015.72 | -0.1 | 12.8 | -12.2 | 1615.19 | -10.5 | 1.9 |
| Industrial Transportation | 132 | 945.56 | -0.5 | 12.9 | -14.9 | 1539.37 | -12.1 | 3.4 |
| Support Services | 90 | 538.38 | -0.7 | 8.4 | -24.2 | 801.37 | -23.2 | 1.5 |
| Consumer Goods | 568 | 568.81 | 0.0 | 9.1 | -17.5 | 957.29 | -15.7 | 2.3 |
| Automobiles & Parts | 132 | 522.23 | -0.5 | 2.2 | -32.5 | 844.94 | -31.4 | 2.0 |
| Beverages | 72 | 793.67 | 0.3 | 9.7 | -1.5 | 1351.39 | 0.6 | 2.2 |
| Food Producers | 134 | 736.11 | 0.0 | 6.9 | -6.3 | 1269.94 | -4.1 | 2.4 |
| Household Goods & Home Construction | 65 | 541.51 | 0.4 | 13.7 | -17.2 | 913.41 | -15.0 | 2.7 |
| Leisure Goods | 53 | 239.57 | -0.5 | 6.8 | -24.8 | 338.92 | -23.8 | 1.4 |
| Personal Goods | 98 | 931.28 | 0.1 | 18.6 | -19.3 | 1435.44 | -17.9 | 1.9 |
| Tobacco | 14 | 1035.41 | 0.9 | 11.4 | 7.7 | 2931.77 | 12.7 | 5.9 |
| Health Care | 343 | 742.14 | 0.0 | 7.5 | -6.0 | 1183.45 | -4.4 | 1.7 |
| Health Care Equipment & Services | 133 | 1407.29 | 0.0 | 6.9 | -15.4 | 1727.08 | -14.6 | 1.0 |
| Pharmaceuticals & Biotechnology | 210 | 503.76 | 0.1 | 7.9 | 1.4 | 863.80 | 3.7 | 2.1 |
| Consumer Services | 427 | 543.79 | 0.0 | 9.5 | -22.8 | 776.80 | -22.0 | 1.2 |
| Food & Drug Retailers | 69 | 329.50 | 0.3 | 7.9 | -4.3 | 524.25 | -2.1 | 2.3 |
| General Retailers | 141 | 945.17 | -0.2 | 9.3 | -26.1 | 1292.12 | -25.4 | 1.0 |
| Media | 75 | 312.79 | 0.3 | 9.7 | -33.4 | 449.66 | -32.6 | 1.3 |
| Travel & Leisure | 142 | 462.22 | 0.1 | 10.5 | -9.9 | 675.36 | -8.9 | 1.1 |
| Telecommunication | 89 | 131.85 | -0.5 | 2.8 | -11.1 | 310.90 | -7.6 | 4.3 |
| Fixed Line Telecommuniations | 31 | 102.88 | -0.8 | 3.1 | -8.7 | 278.38 | -4.5 | 5.1 |
| Mobile Telecommunications | 58 | 155.92 | -0.4 | 2.6 | -12.3 | 316.96 | -9.2 | 3.8 |
| Utilities | 200 | 322.53 | -0.6 | 7.8 | -6.0 | 755.28 | -3.1 | 3.3 |
| Electricity | 142 | 365.14 | -0.6 | 6.4 | -5.3 | 841.69 | -2.5 | 3.2 |
| Gas Water & Multiutilities | 58 | 318.13 | -0.7 | 11.3 | -7.8 | 771.88 | -4.6 | 3.6 |
| Financials | 854 | 265.65 | -0.5 | 8.6 | -11.5 | 510.96 | -8.8 | 3.1 |
| Banks | 270 | 201.28 | -0.7 | 6.0 | -11.1 | 431.78 | -7.6 | 4.1 |
| Nonlife Insurance | 72 | 366.43 | -0.1 | 9.2 | 4.6 | 611.76 | 7.5 | 2.8 |
| Life Insurance | 51 | 224.32 | -0.3 | 13.9 | -7.2 | 432.99 | -3.5 | 3.9 |
| Financial Services | 211 | 443.65 | -0.4 | 9.8 | -11.1 | 673.95 | -9.6 | 1.7 |
| Technology | 360 | 479.48 | -0.7 | 13.0 | -29.3 | 625.97 | -28.7 | 1.1 |
| Software & Computer Services | 184 | 720.98 | -0.4 | 14.3 | -32.6 | 872.43 | -32.2 | 0.7 |
| Technology Hardware & Equipment | 176 | 426.90 | -0.9 | 11.8 | -25.5 | 599.76 | -24.5 | 1.5 |
| Alternative Energy | 20 | 197.22 | 3.2 | 19.6 | -5.4 | 282.99 | -5.0 | 0.4 |
| Real Estate Investment & Services | 142 | 255.52 | -0.4 | 14.7 | -22.3 | 498.17 | -20.1 | 3.1 |
| Real Estate Investment Trusts | 108 | 452.49 | -0.6 | 9.0 | -24.1 | 1058.29 | -21.9 | 3.8 |
| FTSE Global Large Cap | 1906 | 635.66 | -0.3 | 9.5 | -16.3 | 1050.55 | -14.5 | 2.3 |

The FTSE Global Equity Series, launched in 2003, contains the FTSE Global Small Cap Indices and broader FTSE Global All Cap Indices (large/mid/small cap) as well as the enhanced FTSE All-World index Series (large/mid cap) - please see https://research.ftserussell.com/Products/indices/Home/indexfiltergeis?indexName=GEISAC&currency=USD&rtn=CAP&segment=global-developed–emerging. The trade names Fundamental Index® and RAFI® are registered trademarks and the patented and patent-pending proprietary intellectual property of Research Affiliates, LLC (US Patent Nos. 7,620,577; 7,747,502; 7,778,905; 7,792,719; Patent Pending Publ. Nos. US-2006-0149645-A1, US-2007-0055598-A1, US-2008-0288416-A1, US-2010- 0063942-A1, WO 2005/076812, WO 2007/078399 A2, WO 2008/118372, EPN 1733352, and HK1099110). "EDHEC™" is a trade mark of EDHEC Business School As of January 2nd 2006, FTSE is basing its sector indices on the Industrial Classification Benchmark - please see www.ftse.com/icb. For constituent changes and other information about FTSE, please see www.ftse.com. © FTSE International Limited. 2013. All Rights reserved. "FTSE®" is a trade mark of the London Stock Exchange Group companies and is used by FTSE International Limited under licence.

## FTSE 100 SUMMARY

| FTSE 100 | Closing Price | Day's Change | FTSE 100 | Closing Price | Day's Change |
|---|---|---|---|---|---|
| 3I Group PLC | 1313.5 | -4.50 | International Consolidated Airlines Group S.A. | 134.92 | 0.80 |
| Admiral Group PLC | 2026 | -10.00 | Intertek Group PLC | 4105 | -25.00 |
| Airtel Africa PLC | 122.40 | 0.60 | Jd Sports Fashion PLC | 128.65 | -0.15 |
| Anglo American PLC | 3337 | 41.00 | Kingfisher PLC | 246.60 | -2.80 |
| Antofagasta PLC | 1445.5 | 11.00 | Land Securities Group PLC | 621.60 | -0.20 |
| Ashtead Group PLC | 5036 | 24.00 | Legal & General Group PLC | 255.10 | 0.20 |
| Associated British Foods PLC | 1668.5 | 1.00 | Lloyds Banking Group PLC | 46.38 | -0.28 |
| Astrazeneca PLC | 11260 | 82.00 | London Stock Exchange Group PLC | 7980 | -292.00 |
| Auto Trader Group PLC | 580.00 | 4.80 | M&G PLC | 186.80 | -3.75 |
| Aveva Group PLC | 3186 | 3.00 | Melrose Industries PLC | 127.20 | -1.30 |
| Aviva PLC | 443.40 | -1.40 | Mondi PLC | 1541 | -16.50 |
| B&M European Value Retail S.A. | 419.60 | 1.90 | National Grid PLC | 1026 | 6.00 |
| Bae Systems PLC | 816.00 | 2.80 | Natwest Group PLC | 259.90 | -2.00 |
| Barclays PLC | 156.28 | -0.54 | Next PLC | 5854 | 20.00 |
| Barratt Developments PLC | 405.60 | -3.80 | Ocado Group PLC | 663.20 | -7.20 |
| Berkeley Group Holdings (The) PLC | 3822 | -27.00 | Pearson PLC | 938.20 | -13.20 |
| BP PLC | 483.50 | 2.60 | Pershing Square Holdings LTD | 2925 | -15.00 |
| British American Tobacco PLC | 3430.5 | 22.50 | Persimmon PLC | 1276.5 | -19.00 |
| British Land Company PLC | 401.20 | -0.30 | Phoenix Group Holdings PLC | 596.20 | -0.60 |
| Bt Group PLC | 120.95 | 0.25 | Prudential PLC | 1085.5 | 55.00 |
| Bunzl PLC | 3021 | -29.00 | Reckitt Benckiser Group PLC | 5988 | -50.00 |
| Burberry Group PLC | 2124 | -40.00 | Relx PLC | 2330 | -7.00 |
| Centrica PLC | 94.66 | -0.34 | Rentokil Initial PLC | 540.00 | -3.60 |
| Coca-Cola Hbc AG | 2011 | -18.00 | Rightmove PLC | 563.40 | 0.20 |
| Compass Group PLC | 1896 | 21.00 | Rio Tinto PLC | 5671 | 87.00 |
| Convatec Group PLC | 229.60 | -2.80 | Rolls-Royce Holdings PLC | 90.59 | 0.34 |
| Crh PLC | 3268 | -17.00 | Rs Group PLC | 943.50 | -9.50 |
| Croda International PLC | 6914 | -62.00 | Sage Group PLC | 789.80 | -12.00 |
| Dcc PLC | 4401 | 9.00 | Sainsbury (J) PLC | 225.40 | 1.50 |
| Dechra Pharmaceuticals PLC | 2762 | -28.00 | Schroders PLC | 464.30 | 1.70 |
| Diageo PLC | 3821.5 | -25.50 | Scottish Mortgage Investment Trust PLC | 780.20 | -7.60 |
| Endeavour Mining PLC | 1750 | - | Segro PLC | 821.60 | 2.00 |
| Entain PLC | 1364 | -33.50 | Severn Trent PLC | 2759 | 24.00 |
| Experian PLC | 2957 | -10.00 | Shell PLC | 2375.5 | 10.00 |
| F&C Investment Trust PLC | 922.00 | -6.00 | Smith & Nephew PLC | 1089.5 | - |
| Flutter Entertainment PLC | 11985 | -45.00 | Smith (Ds) PLC | 305.30 | -2.50 |
| Frasers Group PLC | 898.50 | 10.50 | Smiths Group PLC | 1590 | -3.50 |
| Fresnillo PLC | 897.00 | 1.40 | Smurfit Kappa Group PLC | 3005 | -10.00 |
| Glaxosmithkline PLC | 1422.2 | -1.80 | Spirax-Sarco Engineering PLC | 11340 | -140.00 |
| Glencore PLC | 561.60 | 3.30 | Sse PLC | 1730 | 7.00 |
| Haleon PLC | 295.00 | 3.55 | St. James's Place PLC | 1168 | -17.00 |
| Halma PLC | 2218 | -31.00 | Standard Chartered PLC | 592.20 | -0.40 |
| Harbour Energy PLC | 309.40 | -3.20 | Taylor Wimpey PLC | 104.05 | -0.85 |
| Hargreaves Lansdown PLC | 854.40 | -17.40 | Tesco PLC | 230.10 | 1.60 |
| Homeserve PLC | 1191 | 1.00 | Unilever PLC | 4179 | 1.00 |
| HSBC Holdings PLC | 500.00 | 1.50 | Unite Group PLC | 941.50 | 1.00 |
| Imperial Brands PLC | 2109 | 9.00 | United Utilities Group PLC | 1056.5 | 7.50 |
| Informa PLC | 618.20 | -2.40 | Vodafone Group PLC | 91.02 | -0.12 |
| Intercontinental Hotels Group PLC | 4809 | 27.00 | Whitbread PLC | 2602 | -7.00 |
| Intermediate Capital Group PLC | 1235 | -8.00 | Wpp PLC | 863.20 | -13.80 |

## UK STOCK MARKET TRADING DATA

| | Dec 05 | Dec 02 | Dec 01 | Nov 30 | Nov 29 | Yr Ago |
|---|---|---|---|---|---|---|
| Order Book Turnover (m) | 71.68 | 384.97 | 384.97 | 190.19 | 1755.35 | 324.43 |
| Order Book Bargains | 606879.00 | 667322.00 | 667322.00 | 786174.00 | 754356.00 | 685355.00 |
| Order Book Shares Traded (m) | 996.00 | 1163.00 | 1163.00 | 1310.00 | 2431.00 | 1248.00 |
| Total Equity Turnover (£m) | 5709.86 | 5333.42 | 5333.42 | 5555.55 | 8071.81 | 7219.48 |
| Total Mkt Bargains | 780977.00 | 844813.00 | 844813.00 | 996902.00 | 955960.00 | 865191.00 |
| Total Shares Traded (m) | 4301.00 | 4626.00 | 4626.00 | 5709.00 | 6733.00 | 5322.00 |

† Excluding intra-market and overseas turnover. *UK only total at 6pm. ‡ UK plus intra-market turnover. (u) Unavaliable. (c) Market closed.

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## UK RIGHTS OFFERS

| Issue price | Amount paid up | Latest renun. date | High | Low | Stock | closing Price p | +or- |
|---|---|---|---|---|---|---|---|

**There are currently no rights offers by any companies listed on the LSE.**

## UK COMPANY RESULTS

| Company | | Turnover | | Pre-tax | | EPS(p) | | Div(p) | | Pay day | Total | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Aberdeen New India Investment Trust | Int | | | 23.348 | 79.650 | 39.680 | 118.850 | 0.00000 | 0.00000 | - | 0.000 | 0.000 |
| CT UK High Income Trust | Int | | | 12.648L | 5.072 | 10.940L | 4.360 | 1.32000 | 1.29000 | Nov 4 | 2.870 | 2.720 |
| Fusion Antibodies | Int | 1.863 | 2.441 | 1.262L | 0.651L | 4.300L | 2.300L | 0.00000 | 0.00000 | - | 0.000 | 0.000 |
| Induction Healthcare Group | Int | 7.118 | 4.593 | 4.517L | 5.600L | 6.000L | 8.000L | 0.00000 | 0.00000 | - | 0.000 | 0.000 |
| Lindsell Train Investment Trust (The) | Int | | | 6.221L | 14.398 | 3139.000L | 7178.000 | 0.00000 | 0.00000 | - | 5112.000 | 4707.000 |
| Momentum Multi-Asset Value Trust | Int | | | 8.688L | 1.395 | 28.660L | 4.070 | 1.80000 | 1.68000 | Dec 16 | 3.960 | 3.360 |
| TR Property Investment Trust | Int | | | 517.603L | 209.009 | 163.860L | 65.370 | 5.65000 | 5.30000 | Jan 12 | 5.650 | 14.300 |
| Zamaz | Pre | 1.679 | - | 1.324L | - | 0.000 | - | 0.00000 | - | - | 0.000 | - |

Figures in £m. Earnings shown basic. Figures in light text are for corresponding period year earlier.
For more information on dividend payments visit www.ft.com/marketsdata

## UK RECENT EQUITY ISSUES

| Issue date | Issue price(p) | Sector | Stock code | Stock | Close price(p) | +/- | High | Low | Mkt Cap (£m) |
|---|---|---|---|---|---|---|---|---|---|
| 11/09 | 250.00 | | ITH | Ithaca Energy PLC | 178.50 | -2.60 | 254.90 | 176.60 | 179421.5 |
| 10/31 | 4.00 | | BWN | Bowen Fintech PLC | 6.25 | 0.00 | 7.38 | 5.90 | 343.8 |
| 10/27 | 10.00 | | UMR | Unicorn Mineral Resource PLC | 18.50 | 0.00 | 19.50 | 10.00 | 513.5 |

§Placing price. *Intoduction. ‡When issued. Annual report/prospectus available at www.ft.com/ir
For a full explanation of all the other symbols please refer to London Share Service notes.

# MARKET DATA

## FT500: THE WORLD'S LARGEST COMPANIES

| Stock | Price | Day Chg | 52 Week High | 52 Week Low | Yld | P/E | MCap m |
|---|---|---|---|---|---|---|---|
| **Australia (A$)** | | | | | | | |
| ANZ Bank | 24.57 | -0.08 | 28.33 | 20.78 | 5.97 | 10.60 | 49605.21 |
| BHP Group | 46.81 | 1.05 | 53.72 | 35.83 | 8.53 | 11.31 | 159941.27 |
| CmwBkAu | 106.94 | -0.01 | 109.20 | 86.98 | 3.18 | 20.69 | 121897.3 |
| CSL | 300.00 | -1.89 | 307.82 | 240.10 | 0.98 | 44.18 | 97641.63 |
| NatAusBk | 31.26 | -0.12 | 33.75 | 25.43 | 2.79 | 17.13 | 66517.31 |
| Telstra | 4.01 | 0.01 | 4.20 | 3.62 | 2.42 | 33.55 | 31272.64 |
| Wesfarmers | 48.59 | 0.13 | 60.78 | 40.03 | 3.56 | 25.70 | 37185.25 |
| Westpac Bank | 23.72 | -0.04 | 24.67 | 18.80 | 3.64 | 17.75 | 56052.46 |
| Woolworths | 34.67 | 0.22 | 41.13 | 31.67 | 3.03 | 40.67 | 28466.2 |
| **Belgium (€)** | | | | | | | |
| AnBshInBv | 56.42 | -0.73 | 58.72 | 45.56 | 0.92 | 28.88 | 103182.8 |
| KBC Grp | 56.24 | 0.84 | 81.70 | 45.53 | 5.96 | 9.38 | 24682.37 |
| **Brazil (R$)** | | | | | | | |
| Ambev | 16.09 | -0.24 | 16.88 | 12.81 | 3.60 | 23.65 | 48206.85 |
| Bradesco♦ | 13.10 | -0.27 | 17.72 | 12.69 | 6.51 | 5.90 | 12137.19 |
| Cielo | 4.49 | -0.19 | 6.22 | 2.01 | 3.33 | 14.79 | 2320.46 |
| ItauHldFin♦ | 22.28 | -0.29 | 26.04 | 18.86 | 3.57 | 8.58 | 21014.23 |
| Petrobras | 29.65 | 0.02 | 42.08 | 25.53 | 16.62 | 4.11 | 41976.56 |
| Vale | 87.71 | 0.91 | 107.11 | 61.90 | 15.21 | 3.81 | 79733.76 |
| **Canada (C$)** | | | | | | | |
| Bausch Hlth | 10.43 | -0.25 | 36.26 | 5.10 | - | -3.24 | 2791.94 |
| BCE | 63.89 | 0.24 | 74.09 | 55.66 | 5.29 | 22.13 | 43099.47 |
| BkMontrl | 132.78 | -1.60 | 154.47 | 113.73 | 3.29 | 10.57 | 66523.25 |
| BkNvaS | 68.21 | -0.74 | 95.00 | 63.19 | 5.25 | 8.83 | 60108.54 |
| Brookfield | 59.51 | -1.24 | 79.04 | 51.07 | 1.07 | 20.42 | 71303.9 |
| CanadPcR | 110.12 | -0.75 | 111.43 | 86.12 | 0.67 | 27.29 | 75767.14 |
| CanImp | 58.60 | -0.79 | 83.75 | 55.35 | 9.90 | 4.20 | 39273.46 |
| CanNatRs | 78.48 | -2.21 | 88.18 | 48.42 | 2.46 | 12.58 | 64283.24 |
| CanNatRy | 172.00 | -0.04 | 174.48 | 137.26 | 1.38 | 25.86 | 86154.39 |
| Enbridge | 54.26 | -0.44 | 59.69 | 46.88 | 5.94 | 19.58 | 81263.9 |
| GtWesLif | 31.49 | -0.44 | 41.50 | 27.99 | 5.92 | 9.16 | 21705.78 |
| ImpOil | 73.65 | -1.70 | 79.83 | 41.04 | 1.35 | 21.92 | 32952.36 |
| Manulife | 24.30 | -0.11 | 28.09 | 20.81 | 4.65 | 7.11 | 33859.06 |
| Nutrien | 107.41 | 0.41 | 147.93 | 85.62 | 2.09 | 15.96 | 41351.98 |
| RylBkC | 133.62 | -0.59 | 149.60 | 116.75 | 3.22 | 12.28 | 136955.07 |
| SHOP | 56.81 | -1.15 | 194.50 | 33.00 | - | 2.03 | 41968.32 |
| Suncor En | 42.54 | -0.46 | 53.62 | 28.77 | 2.38 | 15.91 | 42464.4 |
| ThmReut | 158.07 | -0.61 | 159.60 | 119.23 | 1.25 | 11.27 | 56077.42 |
| TntoDom | 91.25 | -1.11 | 109.08 | 77.27 | 3.46 | 11.83 | 122962.81 |
| TrnCan | 57.95 | -0.24 | 74.44 | 54.60 | 5.80 | 32.27 | 43633.26 |
| **China (HK$)** | | | | | | | |
| AgricBkCh | 2.55 | 0.03 | 3.15 | 2.22 | 8.33 | 3.35 | 10090.63 |
| Bk China | 2.71 | 0.01 | 3.20 | 2.51 | 8.18 | 3.36 | 29173.3 |
| BkofComm | 4.41 | 0.07 | 5.74 | 3.84 | 7.90 | 3.65 | 19876.58 |
| BOE Tech | 0.74 | - | 0.86 | 0.57 | - | 11.94 | 18.95 |
| Ch Coms Cons | 4.09 | 0.31 | 5.17 | 3.09 | 4.96 | 3.40 | 2326.42 |
| Ch Evrbrght | 2.35 | 0.06 | 3.11 | 2.04 | 10.15 | 3.18 | 3835.57 |
| Ch Rail Cons | 5.25 | 0.65 | 5.95 | 3.75 | 4.97 | 2.79 | 1403.26 |
| Ch Rail Gp | 4.56 | 0.36 | 5.88 | 3.48 | 4.49 | 3.67 | 2469.82 |
| ChConstBk | 4.71 | 0.05 | 6.23 | 4.12 | 7.85 | 3.43 | 145772.23 |
| China Vanke | 16.40 | 0.68 | 21.70 | 9.96 | 8.65 | 7.39 | 4025.09 |
| ChinaCitic | 3.44 | 0.04 | 4.08 | 2.92 | 8.13 | 3.19 | 6590.42 |
| ChinaLife | 12.60 | 0.78 | 15.04 | 8.53 | 5.40 | 5.51 | 12069.88 |
| ChinaMBank | 41.90 | 3.40 | 70.80 | 25.40 | 3.40 | 7.73 | 24762.95 |
| ChinaMob | 53.00 | 1.65 | 58.65 | 45.90 | 6.05 | 8.18 | 139596.12 |
| ChinaPcIns | 18.68 | 1.24 | 25.90 | 12.10 | 7.01 | 6.09 | 6673.87 |
| ChMinsheng | 2.70 | 0.04 | 3.29 | 2.19 | 9.07 | 3.49 | 2891.97 |
| ChMrchSecs | 13.74 | 0.27 | 18.56 | 12.06 | 3.24 | 12.05 | 14656.83 |
| Chna Utd Coms | 5.20 | 0.46 | 5.21 | 3.30 | 2.19 | 25.64 | 23140.38 |
| ChShenEgy | 23.15 | 0.60 | 27.65 | 17.76 | 8.82 | 7.02 | 10065.5 |
| ChShpbldng | 3.79 | 0.16 | 4.33 | 3.36 | - | -276.90 | 12029.49 |
| ChStConEng | 6.11 | 0.43 | 6.40 | 4.67 | 3.58 | 4.65 | 35859.99 |
| ChUncHK | 4.78 | 0.27 | 4.88 | 3.27 | 3.28 | 10.54 | 18828.56 |
| CNNC Intl | 6.47 | 0.23 | 8.92 | 5.78 | 1.96 | 16.62 | 17528.99 |
| CSR | 3.19 | 0.10 | 3.73 | 2.37 | 6.46 | 8.77 | 1795.02 |
| Daqin | 6.90 | 0.13 | 7.25 | 5.95 | 7.08 | 10.27 | 14743.55 |
| GuosenSec | 9.32 | 0.20 | 11.70 | 8.43 | 2.51 | 10.52 | 11824.01 |
| HaitongSecs | 5.03 | 0.26 | 7.34 | 3.77 | 5.70 | 5.46 | 2207.8 |
| Hngzh HikVDT | 33.43 | 1.48 | 55.55 | 28.10 | 2.44 | 18.05 | 44086.44 |
| Hunng Pwr | 3.57 | 0.11 | 5.74 | 2.62 | 5.52 | -4.01 | 2160.2 |
| IM Baotou Stl | 2.06 | 0.08 | 3.21 | 1.75 | - | 34.47 | 9378.67 |
| In&CmBkCh | 3.85 | 0.03 | 4.94 | 3.37 | 7.86 | 3.53 | 43016.86 |
| IndstrlBk | 17.91 | 0.50 | 23.22 | 15.01 | 4.41 | 4.82 | 53475.19 |
| Kweichow | 1664.9 | 31.02 | 2216.96 | 1359 | 1.18 | 36.85 | 300592.01 |
| Midea | 0.37 | 0.03 | 0.60 | 0.32 | - | -3.96 | 14.15 |
| New Ch Life Ins | 19.50 | 1.36 | 24.70 | 12.04 | 7.83 | 3.70 | 2595.92 |
| PetroChina | 3.60 | 0.03 | 4.49 | 3.01 | 6.61 | 7.26 | 9778.07 |
| PingAnIns | 52.95 | 6.15 | 69.40 | 31.30 | 4.72 | 8.42 | 50765.89 |
| PngAnBnk | 13.53 | 0.63 | 19.06 | 10.39 | 1.31 | 7.94 | 37735.83 |
| Pwr Cons Corp | 8.03 | 0.52 | 9.81 | 6.65 | 1.13 | 16.40 | 12685.29 |
| SaicMtr | 15.26 | 0.20 | 22.14 | 13.77 | 3.96 | 7.50 | 25624.63 |
| ShenwanHong | 0.09 | 0.00 | 0.18 | 0.05 | - | 2.69 | 103.15 |
| ShgPdgBk | 7.36 | 0.13 | 8.81 | 6.64 | 6.36 | 4.63 | 31049.02 |
| Sinopec Corp | 3.66 | 0.08 | 4.28 | 3.06 | 3.80 | 4.41 | 11995.27 |
| Sinopec Oil | 2.14 | 0.08 | 2.37 | 1.70 | - | 699.25 | 4173.53 |
| **Denmark (kr)** | | | | | | | |
| DanskeBk | 128.85 | 0.60 | 133.25 | 91.28 | 1.51 | 9.06 | 15725.68 |
| MollerMrsk | 15155 | 130.00 | 24070 | 13185 | 2.19 | 2.54 | 17961.7 |
| NovoB | 900.60 | 3.60 | 901.60 | 604.40 | 1.01 | 44.56 | 222149.53 |
| **Finland (€)** | | | | | | | |
| Nokia | 4.72 | -0.12 | 5.71 | 4.12 | - | 16.70 | 28304.72 |
| SampoA | 48.60 | 0.23 | 48.93 | 35.85 | 3.43 | 10.61 | 27273.46 |
| **France (€)** | | | | | | | |
| Airbus Grpe | 110.32 | -0.66 | 120.36 | 86.52 | - | 20.75 | 91541.94 |
| AirLiquide | 140.24 | -0.26 | 153.40 | 114.48 | 1.91 | 26.55 | 77273.71 |
| AXA | 27.31 | -0.08 | 29.09 | 20.34 | 5.10 | 9.44 | 67579.28 |
| BNP Parib | 52.32 | -0.43 | 68.07 | 40.67 | 4.99 | 7.73 | 67987.06 |
| ChristianDior | 707.50 | -6.50 | 733.50 | 513.00 | 0.96 | 26.50 | 134446.16 |
| Cred Agr | 9.51 | -0.02 | 14.27 | 8.09 | 8.20 | 5.33 | 30454.75 |
| Danone | 50.48 | -0.74 | 58.24 | 46.48 | 3.74 | 17.62 | 35916.06 |
| EDF | 12.00 | - | 12.48 | 6.64 | 3.96 | 9.47 | 49099.33 |
| Engie SA | 14.44 | -0.02 | 14.68 | 9.79 | 3.58 | 10.43 | 37015.48 |
| EssilorLuxottica | 176.85 | -3.70 | 188.64 | 132.70 | 0.60 | 55.33 | 83300.97 |
| Hermes Intl | 1509.5 | -11.00 | 1665.5 | 957.60 | 0.29 | 66.48 | 167763.66 |
| LOreal | 356.80 | -3.95 | 433.65 | 300.45 | 1.09 | 44.60 | 201607.62 |
| LVMH | 714.50 | -0.80 | 738.50 | 535.00 | 0.95 | 30.69 | 378546.33 |
| Orange | 9.37 | -0.28 | 11.94 | 8.93 | 6.24 | 3192.02 | 26248 |
| PernodRic | 187.75 | -2.95 | 214.00 | 166.60 | 1.62 | 29.08 | 50984.45 |
| Renault | 35.05 | 0.45 | 38.07 | 20.47 | - | -26.85 | 10911.86 |
| Safran | 116.60 | -0.56 | 118.26 | 87.85 | 0.36 | 1196.56 | 52444.52 |
| Sanofi | 85.94 | 0.17 | 106.08 | 76.45 | 3.63 | 17.83 | 114674.33 |
| Sant Gbn | 45.86 | 0.17 | 64.82 | 35.20 | 2.89 | 11.25 | 24900.38 |
| Schneider | 139.50 | -0.98 | 173.78 | 110.02 | 1.82 | 25.25 | 83870.2 |
| SocGen | 23.13 | -0.26 | 37.68 | 18.34 | 2.33 | 4.01 | 20690.35 |
| Total | 58.76 | -0.13 | 60.44 | 42.18 | 4.48 | 11.58 | 162018.91 |
| UnibailR | 51.60 | 0.28 | 73.09 | 39.68 | - | -7.54 | 7537.71 |
| Vinci | 97.71 | -0.54 | 103.74 | 80.74 | 2.68 | 22.23 | 61511.69 |
| Vivendi | 8.90 | -0.05 | 12.16 | 7.59 | 6.57 | -16.32 | 10391.35 |
| **Germany (€)** | | | | | | | |
| Allianz | 203.00 | 0.35 | 232.50 | 156.22 | 4.61 | 13.16 | 86191.81 |
| BASF | 47.97 | -0.76 | 69.15 | 37.90 | 6.70 | 8.15 | 46383.71 |
| Bayer | 53.09 | -1.75 | 67.99 | 43.91 | 3.67 | 53.41 | 54908.35 |
| BMW | 85.86 | 0.60 | 97.60 | 67.58 | 2.16 | 4.69 | 54413.99 |
| Continental | 56.98 | -0.28 | 97.48 | 44.44 | - | 9.01 | 11997.54 |
| Deut Bank | 10.15 | 0.13 | 14.64 | 7.46 | - | 10.25 | 22084.4 |
| Deut Tlkm | 19.52 | -0.13 | 19.86 | 14.47 | 3.00 | 23.03 | 102480.95 |
| DeutsPost | 38.50 | -0.37 | 56.91 | 29.68 | 3.50 | 10.00 | 50220.33 |
| E.ON | 9.26 | 0.06 | 12.54 | 7.28 | 4.95 | 5.28 | 25737.78 |
| Fresenius Med | 30.97 | -0.11 | 63.66 | 26.19 | 4.22 | 9.60 | 9553.05 |
| Fresenius SE | 26.62 | -0.43 | 38.11 | 19.76 | 3.30 | 8.64 | 15651.63 |
| HenkelKgaA | 63.80 | -0.80 | 74.75 | 56.55 | 2.80 | 17.41 | 17449.36 |
| Linde | 318.05 | -2.40 | 334.70 | 244.00 | 1.14 | 50.71 | 165532.23 |
| Mercedes-Benz | 64.26 | 0.17 | 77.90 | 50.19 | 2.05 | 6.59 | 72374.44 |
| MuenchRkv | 303.50 | 1.80 | 305.10 | 205.15 | 3.15 | 14.88 | 44763.1 |
| SAP | 105.24 | -1.22 | 125.26 | 81.35 | 1.71 | 24.21 | 136108.17 |
| Siemens | 135.44 | 0.74 | 154.70 | 93.67 | 2.52 | 20.90 | 121197.19 |
| Volkswgn | 185.85 | 1.90 | 282.60 | 158.80 | 2.52 | 6.45 | 57735.57 |
| **Hong Kong (HK$)** | | | | | | | |
| AIA | 83.40 | 3.75 | 92.50 | 57.25 | 1.44 | 21.30 | 126945.21 |
| BOC Hold | 24.00 | -0.45 | 32.75 | 23.55 | 4.65 | 12.29 | 32665.66 |
| Ch OSLnd&Inv | 20.15 | -0.10 | 27.35 | 14.58 | 5.36 | 4.99 | 28390.81 |
| ChngKng | 46.10 | -0.10 | 57.00 | 42.90 | 3.45 | 10.53 | 21395.36 |
| Citic Ltd | 7.69 | 0.15 | 9.26 | 7.01 | 6.29 | 3.55 | 28798.2 |
| Citic Secs | 16.76 | 1.24 | 21.32 | 11.82 | 2.56 | 8.61 | 5653 |
| CK Hutchison | 44.65 | 0.65 | 60.45 | 38.80 | 4.59 | 5.65 | 22040.39 |
| CNOOC | 10.06 | 0.09 | 12.54 | 7.62 | 4.04 | 8.76 | 57729.58 |
| HangSeng | 124.50 | 4.20 | 169.50 | 110.00 | 4.40 | 19.99 | 30641.66 |
| HK Exc&Clr | 329.40 | 14.20 | 483.60 | 208.20 | 2.50 | 37.06 | 53762.3 |
| MTR | 36.55 | -0.60 | 43.70 | 33.45 | 3.02 | 26.40 | 29181.94 |
| SandsCh | 24.30 | 2.95 | 24.90 | 12.50 | - | -26.78 | 25317.28 |
| SHK Props | 93.50 | -0.20 | 99.55 | 83.10 | 4.76 | 10.66 | 34879.3 |
| Tencent | 314.00 | 18.00 | 488.00 | 198.60 | 0.46 | 12.33 | 387308.94 |
| **India (Rs)** | | | | | | | |
| Bhartiartl | 844.10 | -4.55 | 860.55 | 628.75 | - | 181.78 | 61457.33 |
| HDFC Bk | 1612.95 | 5.85 | 1722.1 | 1271.6 | - | 27.58 | 109950.6 |
| Hind Unilevr | 2619.85 | 4.75 | 2734 | 1927 | 1.21 | 70.79 | 75253.84 |
| HsngDevFin | 2675.8 | 10.50 | 2933.8 | 2026 | 0.85 | 22.97 | 59597.76 |
| ICICI Bk | 933.60 | 3.00 | 958.20 | 642.15 | 0.21 | 29.88 | 79602.92 |
| Infosys | 1639.75 | 1.85 | 1923.3 | 1360 | 1.83 | 32.68 | 84357.12 |
| ITC | 336.75 | -0.40 | 361.45 | 207.00 | 3.17 | 28.22 | 51091.67 |
| L&T | 2085.6 | 0.10 | 2110 | 1456.35 | 0.86 | 34.90 | 35830.2 |
| OilNatGas | 143.75 | 2.85 | 189.80 | 119.85 | 6.28 | 4.10 | 22108.46 |
| RelianceIn | 2682.45 | -39.70 | 2856.15 | 2222 | 0.26 | 30.96 | 221882.59 |
| SBI NewA | 617.30 | 9.75 | 622.70 | 430.70 | 0.64 | 17.37 | 67351.28 |
| SunPhrmInds | 1039.4 | -0.60 | 1070.95 | 733.70 | 0.72 | 39.07 | 30488.33 |
| Tata Cons | 3425.9 | -13.25 | 3920 | 2950.1 | 1.05 | 33.00 | 153250.95 |
| **Israel (ILS)** | | | | | | | |
| TevaPha | 29.85 | 0.25 | 37.23 | 23.83 | - | 25.56 | 9727.25 |
| **Italy (€)** | | | | | | | |
| Enel | 5.28 | 0.01 | 7.07 | 3.96 | 6.77 | 25.19 | 56490.45 |
| ENI | 13.83 | -0.06 | 14.85 | 10.43 | 4.75 | 5.98 | 52511.13 |
| Generali | 17.22 | -0.02 | 21.55 | 13.67 | 8.32 | 9.92 | 28653.96 |
| IntSPaolo | 2.08 | -0.02 | 2.92 | 1.58 | 1.71 | 66.11 | 42516.77 |
| Unicred | 12.42 | -0.11 | 15.93 | 7.75 | 0.94 | 18.93 | 29262.06 |
| **Japan (¥)** | | | | | | | |
| AstellasPh | 2089 | 4.50 | 2205 | 1739 | 2.35 | 30.17 | 28139.22 |
| Bridgestne | 5036 | -8.00 | 5509 | 4042 | 3.52 | 10.99 | 26371.59 |
| Canon | 3060 | -31.00 | 3516 | 2526.5 | 3.41 | 14.20 | 29945.82 |
| CntJpRwy | 16055 | -50.00 | 17920 | 14660 | 0.86 | -28.88 | 24266.86 |
| Denso | 7283 | -152.00 | 9575 | 6549 | 2.05 | 19.15 | 42105.82 |
| EastJpRwy | 7653 | -53.00 | 8280 | 6373 | 1.40 | -7.37 | 21221.78 |
| Fanuc | 20860 | 555.00 | 25300 | 18740 | 2.31 | 23.80 | 30903.44 |
| FastRetail | 83890 | 2530 | 88230 | 54310 | 0.67 | 37.78 | 65291.06 |
| Fuji Hvy Ind | 2215 | -21.00 | 2684 | 1664.5 | 2.70 | 24.41 | 12500.73 |
| Hitachi | 7065 | -85.00 | 7463 | 4750 | 1.74 | 9.94 | 50208.82 |
| HondaMtr | 3244 | -28.00 | 3755 | 3043 | 4.25 | 6.58 | 43115.96 |
| JapanTob | 2784 | 6.00 | 2848 | 2000 | 5.24 | 13.60 | 40854.06 |
| KDDI | 3985 | -19.00 | 4636 | 3297 | 3.22 | 12.81 | 67329.28 |
| Keyence | 56470 | -380.00 | 74710 | 44880 | 0.38 | 45.27 | 100769.96 |
| MitsbCp | 4443 | 2.00 | 4845 | 3486 | 3.32 | 9.51 | 48056.55 |
| MitsubEst | 980.36 | 4.41 | 1013.24 | 876.51 | - | - | - |
| MitsubishiEle | 1344.5 | 3.00 | 1518 | 1225.5 | 3.18 | 11.53 | 21182.12 |
| MitsuiFud | 957.23 | -7.49 | 1007.12 | 684.38 | - | - | - |
| MitUFJFin | 741.90 | 3.20 | 828.30 | 615.00 | 3.74 | 7.21 | 70020.63 |
| Mizuho Fin | 1645.5 | -14.00 | 1727.5 | 1433 | 5.07 | 7.55 | 30657.68 |
| Murata Mfg | 7482 | 22.00 | 9410 | 6604 | 1.71 | 14.41 | 37099.32 |
| Nippon T&T | 3713 | -10.00 | 4128 | 3071 | 3.02 | 11.21 | 98675.87 |
| NipponTT | 3713 | -10.00 | 4128 | 3071 | 3.02 | 11.21 | 98675.87 |
| Nissan Mt | 461.70 | -12.90 | 643.00 | 436.50 | - | 14.06 | 14298.22 |
| Nomura | 489.30 | -3.20 | 562.20 | 460.30 | 5.02 | -31.56 | 11608.94 |
| Nppn Stl | 2220.5 | 40.50 | 2318.5 | 1787 | 3.85 | 3.29 | 15483.07 |
| Panasonic | 1242 | -10.00 | 1325 | 1006.5 | 2.15 | 11.78 | 22363.62 |
| Seven & I | 5411 | -13.00 | 6083 | 4729 | 2.03 | 19.32 | 35193.62 |
| ShnEtsuCh | 17375 | -140.00 | 20200 | 14185 | 1.78 | 15.61 | 52389.61 |
| Softbank | 6068 | 13.00 | 7180 | 4210 | 0.77 | 4.89 | 76710.57 |
| Sony | 11145 | -35.00 | 14745 | 9213 | 0.57 | 13.35 | 103123.9 |
| SumitomoF | 4554 | -39.00 | 4816 | 3672 | 4.69 | 8.31 | 45933.99 |
| Takeda Ph | 3955 | -12.00 | 4063 | 3071 | 4.86 | 13.31 | 45916.5 |
| TokioMarine | 2734.5 | -18.50 | 2970.5 | 1936 | 8.59 | 4.17 | 40930.21 |
| Toyota | 1951 | -20.00 | 2375.5 | 1805 | 2.79 | 8.25 | 233550.02 |
| **Mexico (Mex$)** | | | | | | | |
| AmerMvl | 18.23 | -0.02 | 21.44 | 15.66 | 1.86 | 14.14 | 39147.47 |
| FEMSA UBD | 150.77 | -0.34 | 169.96 | 120.63 | 1.40 | 118.19 | 16494.93 |
| WalMrtMex | 73.26 | -1.73 | 82.93 | 64.81 | 0.72 | 35.00 | 64757.71 |
| **Netherlands (€)** | | | | | | | |
| ASML Hld | 572.40 | -2.30 | 724.50 | 376.10 | 0.57 | 45.35 | 242928.57 |
| Heineken | 89.38 | -2.12 | 100.95 | 77.50 | 1.07 | 15.90 | 54199.03 |
| ING | 11.36 | -0.06 | 14.00 | 7.90 | 5.15 | 9.47 | 44551 |
| Unilever | 48.46 | -0.31 | 48.81 | 39.36 | 2.96 | 24.88 | 150088.6 |
| **Norway (Kr)** | | | | | | | |
| DNB | 188.85 | -1.10 | 220.50 | 168.05 | 9.31 | 11.94 | 29807.52 |
| Equinor | 368.25 | 1.95 | 410.95 | 229.40 | 1.35 | 15.71 | 118362.95 |
| Telenor | 95.22 | 0.14 | 148.80 | 88.54 | 9.55 | 15.91 | 13488.17 |
| **Qatar (QR)** | | | | | | | |
| QatarNtBk | 19.50 | 0.10 | 27.00 | 18.40 | 2.62 | 15.57 | 49457.1 |
| **Saudi Arabia (SR)** | | | | | | | |
| AlRajhiBnk | 80.00 | -0.10 | 117.40 | 78.60 | 2.71 | 15.02 | 85129.04 |
| Natnlcombnk | 50.20 | -0.60 | 82.00 | 49.95 | 2.61 | 18.65 | 59801.99 |
| SaudiBasic | 83.80 | -0.20 | 141.40 | 81.10 | 3.50 | 12.07 | 66879.48 |
| SaudiTelec | 37.25 | -0.25 | 48.88 | 37.10 | 9.70 | 7.29 | 49547.75 |
| **Singapore (S$)** | | | | | | | |
| DBS | 34.50 | 0.03 | 37.49 | 29.45 | 3.23 | 14.75 | 65599.74 |
| JardnMt US$ | 47.85 | -1.03 | 62.10 | 42.60 | 3.24 | 8.83 | 13868.09 |
| OCBC | 12.18 | -0.03 | 13.54 | 11.18 | 3.12 | 12.66 | 40438.77 |
| SingTel | 2.70 | 0.01 | 2.88 | 2.31 | 2.51 | 47.52 | 32929.07 |
| UOB | 31.00 | 0.09 | 33.33 | 25.91 | 2.89 | 14.38 | 38354.55 |
| **South Africa (R)** | | | | | | | |
| Firstrand | 62.40 | 1.16 | 79.34 | 56.70 | 4.13 | 11.36 | 20183.5 |
| MTN Grp | 132.79 | 0.81 | 211.49 | 115.46 | - | 18.21 | 14427.68 |
| Naspers N | 2708.57 | 51.78 | 2853.25 | 1392.5 | 0.22 | 14.65 | 68018.58 |
| **South Korea (KRW)** | | | | | | | |
| HyundMobis | 209000 | -4500.00 | 265500 | 189500 | 1.88 | 8.31 | 15244.33 |
| KoreaElePwr | 19850 | -50.00 | 25100 | 16500 | 6.06 | -11.82 | 9858.03 |
| SK Hynix | 81000 | -900.00 | 134000 | 80400 | 1.87 | 5.90 | 45618.06 |
| SmsungEl | 60300 | -100.00 | 80800 | 51800 | 2.35 | 10.64 | 278480.57 |
| **Spain (€)** | | | | | | | |
| BBVA | 5.55 | -0.06 | 6.12 | 3.97 | 6.52 | 7.76 | 35258.03 |
| BcoSantdr | 2.81 | 0.00 | 3.48 | 2.32 | 2.65 | 5.78 | 49672.97 |
| CaixaBnk | 3.40 | -0.02 | 3.64 | 2.22 | 0.77 | 22.94 | 28851.96 |
| Iberdrola | 10.90 | 0.05 | 11.49 | 8.47 | 3.77 | 19.18 | 72971.63 |
| Inditex | 25.02 | -0.27 | 29.89 | 18.55 | 0.86 | 27.08 | 82092.27 |
| Repsol | 14.62 | -0.01 | 16.23 | 9.63 | 4.00 | 9.15 | 22346.55 |
| Telefonica | 3.54 | -0.05 | 5.06 | 3.24 | 9.54 | 2.65 | 21492.43 |
| **Sweden (SKr)** | | | | | | | |
| AtlasCpcoB | 120.10 | 1.26 | 133.60 | 22.08 | 6.27 | 7.84 | 18096.38 |
| Ericsson | 67.56 | -0.75 | 117.32 | 58.81 | 3.44 | 9.73 | 20037.64 |
| H & M | 120.38 | -0.32 | 191.86 | 98.25 | 5.40 | 16.21 | 16974.12 |
| Investor | 195.30 | 2.10 | 228.75 | 158.22 | 1.85 | 8.21 | 34349.12 |
| Nordea Bk | 109.90 | 0.40 | 113.78 | 85.25 | 13.72 | 12.53 | 39131.21 |
| SEB | 120.70 | 0.65 | 136.15 | 91.64 | 8.63 | 9.86 | 25104.29 |
| SvnskaHn | 104.70 | - | 107.45 | 80.88 | 4.93 | 10.04 | 19656.06 |
| Swedbank | 170.15 | 1.30 | 189.60 | 124.50 | 8.83 | 8.88 | 18593.48 |
| Telia Co | 28.69 | -0.17 | 41.70 | 27.93 | 7.20 | 9.89 | 11326.48 |
| Volvo | 193.82 | 0.32 | 218.65 | 148.24 | 3.46 | 12.34 | 29720.5 |
| **Switzerland (SFr)** | | | | | | | |
| ABB | 29.50 | -0.13 | 33.86 | 23.84 | 2.62 | 14.48 | 61774.55 |
| CredSuisse | 3.03 | 0.08 | 9.26 | 2.65 | 3.06 | -4.87 | 8571.67 |
| Nestle | 111.30 | -1.70 | 128.90 | 103.42 | 2.30 | 19.77 | 326219.03 |
| Novartis | 85.80 | 1.66 | 88.42 | 73.32 | 3.27 | 9.54 | 219812.71 |
| Richemont | 121.85 | -0.90 | 146.10 | 90.28 | 1.49 | 29.73 | 67791.85 |
| Roche | 309.55 | 1.30 | 404.20 | 298.60 | 2.64 | 21.22 | 231791.4 |
| Swiss Re | 85.46 | 0.80 | 102.20 | 68.18 | 6.43 | 21.12 | 28919.07 |
| Swisscom | 507.80 | -4.00 | 587.40 | 443.40 | 4.02 | 15.46 | 28036.27 |
| UBS | 17.59 | 0.29 | 19.90 | 13.10 | 1.83 | 9.27 | 66078.71 |
| Zurich Fin | 451.90 | 1.90 | 461.70 | 376.20 | 4.12 | 15.40 | 72467.84 |
| **Taiwan (NT$)** | | | | | | | |
| Chunghwa Telecom | 112.50 | 0.50 | 132.50 | 105.50 | 3.77 | 24.69 | 28662.37 |
| Formosa PetChem | 84.20 | 0.70 | 103.50 | 75.20 | 0.70 | 16.35 | 26342.8 |
| HonHaiPrc | 105.50 | - | 116.00 | 99.50 | 3.76 | 10.72 | 48034.15 |
| MediaTek | 739.00 | - | 1200 | 533.00 | 4.97 | 10.60 | 38819.71 |
| TaiwanSem | 489.00 | -3.50 | 650.00 | 370.00 | 2.17 | 19.62 | 416446.31 |
| **Thailand (THB)** | | | | | | | |
| PTT Explor | 33.00 | -0.25 | 41.25 | 32.75 | 5.75 | 9.28 | 27112.85 |
| **United Arab Emirates (Dhs)** | | | | | | | |
| Emirtestele | 24.30 | 0.70 | 38.98 | 11.60 | 2.75 | 27.17 | 57535.64 |
| **United Kingdom (p)** | | | | | | | |
| Anglo American | 3337 | 41.00 | 4292.5 | 2487.5 | 5.34 | 6.61 | 54537.32 |
| AscBrFd | 1668.5 | 1.00 | 2063 | 1223 | 0.37 | 27.58 | 16104.57 |
| AstraZen | 11260 | 82.00 | 11540 | 8090.32 | 1.84 | 1906.54 | 213184.85 |
| Aviva | 443.40 | -1.40 | 606.58 | 341.92 | 4.82 | 58.34 | 15186.95 |
| Barclays | 156.28 | -0.54 | 209.45 | 132.06 | 1.92 | 3.79 | 30299.72 |
| BP | 483.50 | 2.60 | 503.30 | 319.95 | 3.26 | 17.54 | 107326.24 |
| BrAmTob | 3430.5 | 22.50 | 3645 | 2541.5 | 6.28 | 11.61 | 93817.22 |
| BT | 120.95 | 0.25 | 201.40 | 113.80 | - | 11.74 | 14675.62 |
| Compass | 1896 | 21.00 | 1970.5 | 1479.5 | 0.74 | 46.13 | 40702.29 |
| Diageo | 3821.5 | -25.50 | 4097 | 3282.5 | 1.90 | 29.40 | 106138.02 |
| GlaxoSmh | 1422.2 | -1.80 | 2753.96 | 1280.92 | 5.63 | 16.42 | 70679.88 |
| Glencore | 561.60 | 3.30 | 571.80 | 349.40 | 1.58 | 20.56 | 88330.36 |
| HSBC | 500.00 | 1.50 | 567.20 | 427.51 | 3.23 | 10.92 | 121991.73 |
| Imperial Brands | 2109 | 9.00 | 2185 | 1434.23 | 6.55 | 7.05 | 24264.19 |
| Jardine Mathes. | 62.50 | - | 60.50 | 46.89 | 2.48 | 11.53 | 18114.01 |
| LlydsBkg | 46.38 | -0.28 | 56.00 | 38.10 | 5.54 | 6.44 | 38121.97 |
| LSE Group | 7980 | -292.00 | 8612 | 6230 | 0.96 | 81.60 | 49633.66 |
| Natl Grid | 1026 | 6.00 | 1271.45 | 844.29 | 4.79 | 23.92 | 45886.27 |
| Natwest Group | 259.90 | -2.00 | 284.42 | 196.92 | 4.04 | 10.23 | 30688.73 |
| Prudential | 1085.5 | 55.00 | 1334 | 782.40 | 1.08 | 17.63 | 36464.71 |
| ReckittB | 5988 | -50.00 | 6824 | 5400 | 2.92 | -25.91 | 52365.86 |
| RELX | 2330 | -7.00 | 2474 | 2056 | 2.05 | 30.74 | 54522.7 |
| RioTinto | 5671 | 87.00 | 6343 | 4436.95 | 8.86 | 5.93 | 86590 |
| RollsRoyce | 90.59 | 0.34 | 161.91 | 64.44 | - | 61.63 | 9261.93 |
| Shell PLC | 2375.5 | 10.00 | 2527 | 1535.56 | 2.55 | 12.52 | 204777.2 |
| StandCh | 592.20 | -0.40 | 641.00 | 414.00 | 1.50 | 13.28 | 20945.86 |
| Tesco | 230.10 | 1.60 | 304.10 | 194.35 | 3.98 | 11.72 | 20801.08 |
| Unilever♦ | 4179 | 1.00 | 4182.6 | 3267.5 | 3.46 | 21.45 | 129430.51 |
| Vodafone | 91.02 | -0.12 | 141.60 | 89.87 | 8.50 | -203.62 | 30497.06 |
| WPP | 863.20 | -13.80 | 1231.5 | 713.00 | 3.07 | 16.44 | 11295.19 |
| **United States of America ($)** | | | | | | | |
| 21stC Fox A | 32.37 | -0.18 | 44.95 | 28.02 | 1.31 | 14.53 | 9791.1 |
| 3M | 124.87 | -2.12 | 179.18 | 107.07 | 4.28 | 13.68 | 69021.01 |
| AbbottLb | 105.73 | -2.36 | 142.60 | 93.25 | 1.54 | 29.75 | 184348.06 |
| Abbvie | 163.60 | -0.06 | 175.91 | 117.00 | 2.87 | 28.12 | 289323.41 |
| Accenture | 294.05 | -6.08 | 417.37 | 242.95 | 1.13 | 33.10 | 195479.49 |
| Activision Bli. | 76.72 | 0.96 | 82.00 | 56.40 | 0.55 | 24.72 | 60043.01 |
| Adobe | 334.21 | -7.33 | 675.21 | 274.73 | - | 36.44 | 155371.9 |
| Advanced Micro | 74.04 | -0.94 | 156.73 | 54.57 | - | 31.94 | 119378.85 |
| AEP | 94.24 | -0.88 | 105.60 | 80.30 | 2.87 | 21.06 | 48426.51 |
| Aflac | 70.93 | -1.41 | 72.70 | 52.07 | 1.68 | 12.30 | 44103.46 |
| AirProd | 315.25 | -3.19 | 320.62 | 216.24 | 1.72 | 36.71 | 69943.25 |
| Allstate | 127.99 | -2.86 | 144.46 | 106.11 | 2.28 | 8.36 | 33944.17 |
| Alphabet | 100.27 | -0.17 | 151.55 | 83.34 | - | 0.99 | 598912.71 |
| Altria | 47.60 | -0.03 | 57.05 | 40.35 | 6.67 | 39.38 | 85307.42 |
| Amazon | 92.04 | -2.09 | 177.50 | 85.87 | - | 1.57 | 938960.25 |
| AmerAir | 14.11 | 0.14 | 21.42 | 11.65 | - | -4.18 | 9170.1 |
| AmerExpr | 156.94 | 0.19 | 199.55 | 130.65 | 1.07 | 16.89 | 117270.7 |
| AmerIntGrp | 61.48 | -1.27 | 65.73 | 47.05 | 1.88 | 6.30 | 45678.41 |
| AmerTower | 216.35 | -3.02 | 291.99 | 178.17 | 2.17 | 42.37 | 100733.77 |
| Amgen | 284.59 | -0.92 | 296.67 | 200.84 | 2.23 | 30.69 | 151851.31 |
| Amphenol Corp | 79.43 | -1.19 | 88.45 | 61.67 | 0.89 | 35.08 | 47268.36 |
| Analog Devices | 167.35 | -1.28 | 187.69 | 133.48 | 1.50 | 62.29 | 85230.68 |
| Anthem | 482.58 | 12.71 | - | - | - | - | - |
| Aon Cp | 308.76 | 1.98 | 341.98 | 246.21 | 0.58 | 61.67 | 63867.91 |
| Apple | 146.45 | -1.36 | 182.13 | 129.04 | 0.53 | 26.92 | 2329743.88 |
| Applied Materi. | 106.20 | -0.51 | 167.06 | 71.12 | 0.81 | 16.24 | 91364.86 |
| Aptiv | 101.29 | -2.45 | 170.76 | 77.96 | - | 57.87 | 27443.13 |
| ArcherDan | 90.31 | -1.40 | 98.88 | 62.06 | 1.48 | 20.90 | 49610.37 |
| AT&T | 18.76 | -0.26 | 21.53 | 14.46 | 10.00 | 7.53 | 133702.52 |
| Autodesk | 197.71 | -3.41 | 285.38 | 163.20 | - | 96.92 | 42676.41 |
| AutomData | 264.84 | -5.06 | 270.88 | 192.26 | 1.30 | 45.45 | 109862.99 |
| AutoZone | 2545.31 | -26.28 | 2610.05 | 1703.32 | - | 25.50 | 48313.61 |
| Avago Tech | 533.20 | -7.60 | 677.76 | 415.07 | 2.54 | 33.38 | 215946.78 |
| BakerHu | 29.09 | -0.43 | 39.78 | 20.42 | 2.30 | 74.62 | 29127.68 |
| Bank of NY | 44.21 | -1.02 | 64.63 | 36.22 | 2.65 | 11.84 | 35730.02 |
| BankAm | 34.81 | -1.28 | 50.11 | 29.31 | 2.02 | 10.81 | 279220.75 |
| Baxter | 51.85 | -1.37 | 89.70 | 49.83 | 1.89 | 22.72 | 26138.66 |
| BectonDick | 247.38 | -5.01 | 277.29 | 215.90 | 1.23 | 47.44 | 70100.09 |
| BerkshHat | 470434.81 | -6968.17 | 544389.26 | 393012.25 | - | 8.77 | 280767.73 |
| Biogen | 290.61 | -8.29 | 311.88 | 187.16 | - | 30.98 | 41848.25 |
| BlackRock | 703.28 | -9.70 | 933.06 | 503.12 | 2.12 | 20.40 | 105629.55 |
| Boeing | 185.28 | 2.41 | 223.23 | 113.02 | - | -28.73 | 110021.33 |
| Booking Holdings | 2069.1 | -16.34 | 2715.66 | 1616.85 | - | 81.42 | 80259.12 |
| Bristol-Myers | 80.85 | -0.28 | 81.44 | 55.76 | 2.24 | 28.73 | 171900.06 |
| Broadcom | 533.20 | -7.60 | 677.76 | 415.07 | 2.54 | 33.38 | 215946.78 |
| Cadence Design | 167.65 | -4.78 | 194.97 | 132.32 | - | 74.34 | 45989.08 |
| CapOne | 94.79 | -2.90 | 160.54 | 90.27 | 1.90 | 3.90 | 36181.21 |
| CardinalHlth | 79.96 | -0.93 | 81.57 | 46.79 | 2.21 | 45.92 | 20958.93 |
| Carnival | 9.90 | -0.10 | 23.86 | 6.11 | - | -1.31 | 11019.8 |
| Caterpillar | 232.95 | -3.18 | 239.85 | 160.60 | 1.66 | 21.83 | 121229.36 |
| Centene Corp | 86.03 | 0.24 | 98.53 | 70.31 | - | 41.83 | 48715.32 |
| CharlesSch | 81.08 | -1.38 | 96.24 | 59.35 | 0.80 | 31.76 | 147228.77 |
| Charter Comms | 391.07 | -1.63 | 693.09 | 297.66 | - | 17.72 | 60877.98 |
| Chevron Corp | 177.70 | -3.34 | 189.68 | 110.73 | 2.70 | 24.20 | 343597.9 |
| Chipotle Mexic. | 1575.72 | -29.16 | 1776.67 | 1196.28 | - | 76.28 | 43680.71 |
| Chubb | 216.98 | -2.18 | 222.00 | 173.78 | 1.32 | 12.48 | 90057.61 |
| Cigna | 326.96 | 0.88 | 331.05 | 198.08 | 1.10 | 23.04 | 99964.42 |
| Cintas Corp | 458.07 | -4.46 | 463.72 | 343.86 | 0.72 | 44.51 | 46514.87 |
| Cisco | 49.40 | -0.30 | 64.29 | 38.61 | 2.73 | 19.44 | 202976.9 |
| Citigroup | 45.85 | -1.39 | 69.11 | 40.01 | 4.01 | 5.01 | 88804.7 |
| CME Grp | 177.98 | 1.35 | 256.94 | 166.58 | 1.82 | 27.06 | 64022.05 |
| Coca-Cola | 63.44 | -0.92 | 67.20 | 52.98 | 2.39 | 31.25 | 274325.5 |
| Cognizant | 61.52 | -0.87 | 93.47 | 51.33 | 1.41 | 16.84 | 31616.45 |
| ColgtPlm | 77.44 | -0.73 | 85.18 | 67.84 | 2.09 | 33.66 | 64678.99 |
| Comcast | 35.57 | -0.29 | 53.32 | 28.39 | 2.54 | 12.97 | 153447.71 |
| ConocPhil | 120.86 | -1.33 | 138.49 | 66.06 | 1.46 | 22.07 | 150593.92 |
| Constellation | 256.14 | -4.91 | 261.53 | 207.59 | 1.08 | -1278.48 | 41296.04 |
| Corning | 33.60 | -0.40 | 43.47 | 28.98 | 2.58 | 29.10 | 28419.26 |
| Corteva | 65.08 | -2.23 | 68.43 | 43.74 | 0.74 | 30.43 | 46499.14 |
| Corteva | 65.08 | -2.23 | 68.43 | 43.74 | 0.74 | 30.43 | 46499.14 |
| Costco | 486.64 | -7.89 | 612.27 | 406.51 | 0.59 | 43.06 | 215388.88 |
| CrownCstl | 138.50 | -1.67 | 208.69 | 121.71 | 3.56 | 57.50 | 59977.15 |
| CSX | 31.47 | -0.59 | 38.63 | 25.80 | 1.12 | 19.26 | 66152.29 |
| CVS | 101.85 | -0.73 | 111.25 | 86.28 | 1.77 | 18.98 | 133827.53 |
| Danaher | 268.31 | -5.92 | 330.46 | 233.71 | 0.30 | 33.94 | 195318.58 |
| Deere | 435.79 | -9.82 | 448.40 | 283.81 | 0.82 | 26.53 | 131529.98 |
| Delta | 36.19 | 0.48 | 46.27 | 27.20 | - | 48.15 | 23204.35 |
| Devon Energy | 67.39 | -1.08 | 79.40 | 35.55 | 2.64 | 17.83 | 44049.57 |
| Digital Realty | 109.63 | -1.22 | 176.53 | 85.76 | 3.82 | 20.46 | 31521.07 |
| DiscFinServ | 103.49 | -1.91 | 129.12 | 87.64 | 1.64 | 6.43 | 28276.13 |
| Disney | 97.34 | -2.09 | 157.50 | 86.28 | - | 62.73 | 177508.44 |
| Dollar General | 244.99 | 1.03 | 262.21 | 183.25 | 0.62 | 26.45 | 54773.59 |
| DominRes | 58.99 | -1.48 | 88.78 | 57.95 | 3.85 | 20.50 | 49154.9 |
| DukeEner | 98.92 | -0.60 | 116.33 | 83.76 | 3.56 | 22.24 | 76174.61 |
| DuPont | 70.72 | -0.84 | 84.08 | 49.52 | 1.53 | 24.27 | 35132.91 |
| Eaton | 160.50 | -2.81 | 174.47 | 122.50 | 1.71 | 33.32 | 63830.85 |
| eBay | 44.22 | -0.99 | 68.54 | 35.92 | 1.47 | 128.98 | 23993.67 |
| Ecolab | 150.58 | -0.78 | 236.89 | 131.04 | 1.17 | 42.69 | 42889.41 |
| Edwards Lifesc. | 74.63 | -1.92 | 131.73 | 67.13 | - | 34.76 | 46140.78 |
| Eli Lilly | 371.75 | -3.01 | 375.25 | 231.87 | 0.83 | 67.34 | 353228.63 |
| Emerson | 95.22 | -1.66 | 100.00 | 72.41 | 1.92 | 23.05 | 56310.15 |
| EOG Res | 135.50 | -3.47 | 150.88 | 80.67 | 1.07 | 18.80 | 79591.28 |
| Equinix | 691.59 | 0.12 | 847.10 | 494.89 | 1.50 | 138.63 | 63998.43 |
| EquityResTP | 63.16 | -0.95 | 94.32 | 59.32 | 3.44 | 20.43 | 23869.36 |
| Exelon | 41.38 | -0.07 | 50.71 | 29.10 | 3.34 | 26.36 | 41121.05 |
| ExxonMb | 107.71 | -2.15 | 114.66 | 57.96 | 2.92 | 22.15 | 443581.38 |
| Fedex | 177.94 | -3.47 | 260.50 | 141.92 | 1.45 | 10.61 | 46303.51 |
| Fidelity NIS | 73.13 | -0.93 | 122.06 | 56.53 | 1.92 | 120.99 | 43393.84 |
| Fiserv | 102.45 | -3.01 | 110.94 | 87.03 | - | 57.07 | 65058.63 |
| FordMtr | 13.53 | -0.34 | 25.87 | 10.61 | 0.67 | 3.37 | 53418.91 |
| Franklin | 26.87 | -0.38 | 35.18 | 20.24 | 3.79 | 7.88 | 13423.14 |
| GenDyn | 250.83 | -4.91 | 256.86 | 194.56 | 1.68 | 24.07 | 68865.12 |
| GenElectric | 84.99 | -1.90 | 101.91 | 59.93 | 0.34 | -28.99 | 92860.4 |
| GenMills | 86.13 | -0.39 | 86.73 | 61.67 | 2.16 | 25.22 | 51121.23 |
| GenMotors | 39.33 | -0.57 | 67.21 | 30.33 | - | 6.51 | 55876 |
| GileadSci | 88.31 | -0.72 | 89.10 | 57.17 | 2.90 | 19.86 | 110762.27 |
| GoldmSchs | 370.68 | -9.90 | 401.75 | 277.84 | 1.58 | 6.91 | 125523.92 |
| Halliburton | 37.31 | -1.56 | 43.99 | 21.07 | 0.63 | 23.24 | 33879.23 |
| HCA Hold | 235.98 | -3.05 | 279.02 | 164.47 | 0.73 | 12.36 | 66715.49 |
| Hew-Pack | 29.33 | -0.31 | 41.47 | 24.08 | 2.58 | 5.87 | 29504.19 |
| Hilton Worldwi. | 140.36 | -1.06 | 167.99 | 108.41 | - | 106.57 | 37961.21 |
| HiltonWwde | 140.36 | -1.06 | 167.99 | 108.41 | - | 106.57 | 37961.21 |
| HomeDep | 321.00 | -6.99 | 420.61 | 264.51 | 1.87 | 22.70 | 328616.19 |
| Honywell | 215.95 | -3.13 | 220.96 | 166.63 | 1.57 | 30.26 | 145187.99 |
| HumanaInc | 549.60 | 2.82 | 571.30 | 363.73 | 0.46 | 26.87 | 69579.53 |
| IBM | 147.63 | -1.04 | 150.46 | 115.55 | 4.00 | 31.41 | 133476.17 |
| IDEXX Laborato. | 425.31 | -9.99 | 664.70 | 317.06 | - | 54.82 | 35222.88 |
| IllinoisTool | 224.75 | -3.54 | 248.11 | 173.52 | 1.89 | 29.28 | 69040.14 |
| Illumina | 216.51 | -2.25 | 397.44 | 173.45 | - | 47.62 | 34057.02 |
| Intcntl Exch | 107.27 | -1.98 | 138.46 | 88.60 | 1.11 | 16.56 | 59915.83 |
| Intel | 29.27 | -0.14 | 55.00 | 24.59 | 4.28 | 6.68 | 120797.29 |
| Intuit | 395.54 | -12.39 | 684.07 | 339.36 | 0.58 | 54.91 | 111115.81 |
| John&John | 178.70 | -0.19 | 186.69 | 155.72 | 2.12 | 25.36 | 467195.15 |
| JohnsonCn | 67.05 | -1.07 | 81.69 | 45.52 | 1.55 | 33.94 | 46043.5 |
| JPMrgnCh | 131.56 | -3.60 | 163.39 | 101.28 | 2.61 | 9.49 | 385892.44 |
| Kimb-Clark | 136.93 | -1.00 | 144.53 | 108.74 | 3.10 | 28.49 | 46212.79 |
| KinderM | 18.71 | -0.29 | 20.20 | 15.01 | 5.36 | 44.80 | 42055.25 |
| KLA Corp | 387.85 | -1.71 | 442.44 | 250.20 | 0.91 | 22.13 | 54965.45 |
| Kraft Heinz | 39.51 | -0.32 | 44.87 | 32.73 | 3.65 | 53.41 | 48396.99 |
| Kroger | 46.28 | -1.29 | 62.78 | 41.82 | 1.53 | 23.42 | 33127.52 |
| LasVegasSd | 47.54 | -0.42 | 49.30 | 28.88 | - | -34.90 | 36328.46 |
| LibertyGbl | 19.45 | -0.18 | 29.08 | 15.22 | - | 0.92 | 3343.5 |
| Lilly (E) | 371.75 | -3.01 | 375.25 | 231.87 | 0.83 | 67.34 | 353228.63 |
| Linde | 333.05 | -4.30 | 346.50 | 262.47 | 1.15 | 50.44 | 164653.1 |
| Lockheed | 491.94 | -4.29 | 498.95 | 330.34 | 2.04 | 23.41 | 128924.67 |
| Lowes | 207.97 | -6.87 | 263.31 | 170.12 | 1.31 | 18.97 | 129087.1 |
| Lyondell | 83.57 | -1.33 | 117.22 | 71.46 | 4.79 | 5.52 | 27212.43 |
| Marathon Ptl | 114.01 | -4.22 | 127.62 | 59.96 | 1.84 | 62.57 | 53432.02 |
| Marsh&M | 172.09 | -1.82 | 183.14 | 142.80 | 1.40 | 29.34 | 85358.28 |
| MasterCard | 355.89 | -4.17 | 399.92 | 276.87 | 0.57 | 45.04 | 339448.96 |
| McDonald's | 271.82 | -1.58 | 281.67 | 217.68 | 1.74 | 30.01 | 199087.46 |
| McKesson | 381.20 | -5.65 | 401.78 | 217.03 | 0.42 | 47.86 | 54051.67 |
| Medtronic | 79.15 | -0.47 | 114.44 | 75.83 | 2.84 | 23.94 | 105283.75 |
| Merck | 109.51 | -0.53 | 110.98 | 71.50 | 2.17 | 24.98 | 277651.21 |
| Meta | 196.64 | 0.99 | 384.33 | 169.00 | - | 15.41 | 450997.53 |
| Metlife | 75.30 | -1.62 | 77.36 | 57.41 | 2.28 | 11.42 | 59076.92 |
| Microsoft | 250.89 | -4.13 | 344.30 | 213.43 | 0.83 | 29.62 | 1870278.86 |
| Mnstr Bvrg | 102.46 | -1.58 | 104.65 | 71.78 | - | 44.19 | 53457.85 |
| MondelezInt | 67.35 | -0.96 | 69.47 | 54.72 | 1.78 | 24.56 | 91974.41 |
| Monsanto | 10.04 | 0.01 | 10.04 | 9.66 | - | 50.99 | 250.88 |
| MorganStly | 89.89 | -2.21 | 109.73 | 72.05 | 2.11 | 12.41 | 151919.71 |
| Netflix | 317.07 | -3.34 | 632.46 | 162.71 | - | 31.27 | 141102.65 |
| NextEraE | 85.54 | 0.34 | 92.91 | 67.22 | 1.71 | 124.56 | 169981.98 |
| Nike | 109.81 | -2.39 | 173.35 | 82.22 | 0.96 | 31.82 | 138761.7 |
| NorfolkS | 248.34 | -5.74 | 296.87 | 203.65 | 1.51 | 22.73 | 57493.08 |
| Northrop | 536.64 | -8.96 | 556.27 | 352.60 | 1.04 | 13.66 | 82595.42 |
| NXP | 168.26 | -2.80 | 239.91 | 132.08 | 1.21 | 27.47 | 43602.03 |
| Occid Pet | 67.40 | -0.81 | 77.13 | 26.05 | 0.05 | 36.27 | 61261.81 |
| Oracle | 80.52 | -2.83 | 106.34 | 60.78 | 1.45 | 33.75 | 217095.31 |
| Pepsico | 183.45 | -2.24 | 186.62 | 153.37 | 2.09 | 37.04 | 252740.75 |
| Perrigo | 31.68 | -0.27 | 43.90 | 31.30 | 2.73 | -35.83 | 4264.71 |
| Pfizer | 50.54 | -0.37 | 61.71 | 41.45 | 2.78 | 14.26 | 283696.92 |
| Phillips66 | 104.56 | -2.10 | 113.53 | 68.57 | 3.12 | 39.03 | 49419.65 |
| PhilMorris | 103.62 | -0.68 | 112.48 | 82.85 | 4.27 | 19.70 | 160631.96 |
| PNCFin | 154.55 | -9.68 | 214.50 | 143.52 | 2.80 | 13.49 | 62332.96 |
| PPG Inds | 134.54 | -2.77 | 172.78 | 107.06 | 1.59 | 32.73 | 31619.41 |
| ProctGmbl | 148.97 | -1.64 | 165.35 | 122.18 | 2.17 | 28.06 | 355367.86 |
| Prudntl | 105.05 | -2.64 | 124.22 | 85.46 | 3.95 | 5.97 | 39076.74 |
| PublStor | 291.45 | -4.36 | 421.76 | 270.73 | 2.48 | 32.73 | 51188.93 |
| Qualcomm | 124.26 | -1.40 | 192.68 | 101.93 | 1.95 | 15.78 | 139295.46 |
| Raytheon | 100.59 | -0.42 | 106.02 | 79.69 | 1.80 | 43.22 | 147873.41 |
| Regen Pharm | 754.22 | -12.17 | 769.63 | 538.01 | - | 11.62 | 80764.74 |
| S&P Global | 350.14 | -9.66 | 484.21 | 279.32 | 0.79 | 31.03 | 114075.61 |
| Salesforce | 139.05 | -5.51 | 270.57 | 136.04 | - | 103.16 | 139050 |
| Schlmbrg | 52.26 | -0.53 | 56.04 | 27.65 | 0.86 | 43.89 | 74104.35 |
| Sempra Energy | 165.23 | -0.70 | 176.47 | 121.59 | 2.40 | 45.68 | 51937.3 |
| Shrwin-Will | 254.60 | -3.15 | 354.15 | 195.24 | 0.78 | 40.43 | 65977.91 |
| SimonProp | 118.27 | -1.08 | 161.87 | 86.02 | 5.45 | 19.17 | 38666.24 |
| SouthCpr | 60.96 | -1.01 | 79.32 | 42.42 | 4.74 | 15.39 | 47128.08 |
| Starbucks | 103.43 | -1.62 | 117.34 | 68.39 | 1.60 | 30.99 | 118716.95 |
| StateSt | 77.09 | -0.63 | 103.76 | 58.62 | 2.55 | 11.89 | 28287.42 |
| Stryker | 240.09 | -3.02 | 279.28 | 188.84 | 0.97 | 51.08 | 90857.24 |
| Sychrony Fin | 34.60 | -0.70 | 48.40 | 27.22 | 2.36 | 5.05 | 15588.73 |
| T-MobileUS | 150.88 | -1.54 | 154.38 | 101.51 | - | 69.40 | 187711.75 |
| Target | 157.00 | -7.16 | 254.87 | 137.16 | 1.83 | 12.23 | 72261.23 |
| TE Connect | 123.62 | -2.16 | 164.12 | 104.76 | 1.44 | 18.62 | 39216.04 |
| Tesla Mtrs | 184.17 | -10.69 | 384.29 | 166.19 | - | 41.66 | 581563.27 |
| TexasInstr | 177.28 | -0.38 | 199.86 | 144.46 | 2.14 | 23.79 | 160894.31 |
| TheTrvelers | 186.46 | -3.08 | 191.02 | 147.70 | 1.75 | 12.74 | 43696.44 |
| ThrmoFshr | 557.00 | -6.00 | 668.94 | 475.77 | 0.17 | 31.73 | 218452.93 |
| TJX Cos | 79.44 | -0.76 | 81.17 | 53.69 | 1.19 | 32.31 | 91787.47 |
| Truist Financial Corp | 42.93 | -2.14 | 66.10 | 40.01 | 3.91 | 10.64 | 56951.44 |
| Twitter | 53.70 | 0.35 | 60.16 | 31.30 | - | -224.30 | 41093.72 |
| UnionPac | 211.31 | -3.42 | 278.94 | 183.70 | 1.98 | 21.65 | 129913.56 |
| UPS | 182.64 | -6.76 | 233.72 | 154.87 | 2.02 | 13.79 | 133290.84 |
| USBancorp | 44.14 | -1.51 | 60.50 | 38.39 | 3.60 | 9.59 | 65576.82 |
| UtdHlthcre | 538.07 | 1.91 | 558.10 | 445.17 | 0.94 | 32.99 | 502745.21 |
| ValeroEngy | 122.93 | -4.14 | 146.81 | 65.13 | 2.88 | 60.03 | 47392.38 |
| Verizon | 37.14 | -1.04 | 55.51 | 34.55 | 6.16 | 7.74 | 155981.22 |
| VertexPharm | 317.65 | -3.72 | 323.61 | 202.00 | - | 39.08 | 81538.04 |
| VF Cp | 30.47 | -2.75 | 78.17 | 26.46 | 5.83 | 11.07 | 11839.61 |
| Visa Inc | 214.82 | -2.84 | 235.85 | 174.60 | 0.56 | 39.43 | 349695.46 |
| Walgreen | 40.96 | -0.53 | 53.46 | 30.39 | 4.22 | 6.58 | 35418.42 |
| WalMartSto | 151.22 | -2.00 | 160.77 | 117.27 | 1.32 | 34.10 | 407810.1 |
| Walt Disney | 97.34 | -2.09 | 157.50 | 86.28 | - | 62.73 | 177508.44 |
| Waste Manage. | 167.58 | -2.23 | 175.98 | 138.58 | 1.24 | 43.30 | 68787.75 |
| WellsFargo | 44.46 | -1.49 | 60.30 | 36.54 | 1.57 | 9.96 | 169395.37 |
| Williams Cos | 34.68 | -0.28 | 37.97 | 24.86 | 4.27 | 31.00 | 42252.03 |
| Workday | 166.32 | -4.67 | 285.58 | 128.72 | - | -1521.93 | 33596.64 |
| Yum!Brnds | 130.31 | 0.63 | 139.85 | 103.97 | 1.38 | 27.73 | 36706.75 |
| Zoetis | 155.30 | -2.12 | 249.27 | 124.15 | 0.58 | 40.32 | 72380.98 |
| Zoom | 73.98 | -0.33 | 205.22 | 69.54 | - | 18.05 | 18567.14 |
| **Venezuela (VEF)** | | | | | | | |
| Bco de Vnzla | 2.15 | 0.15 | 2.15 | 0.32 | 108.47 | - | 671.51 |
| Bco Provncl | 4.35 | -0.04 | 4.39 | 1.70 | - | 0.00 | 139.70 |

Closing prices and highs & lows are in traded currency (with variations for that country indicated by stock), market capitalisation is in USD. Highs & lows are based on intraday trading over a rolling 52 week period.
♦ ex-dividend
■ ex-capital redistribution
# price at time of suspension

## FT 500: TOP 20

| | Close price | Prev price | Day change | Day change % | Week change | Week change % | Month change % |
|---|---|---|---|---|---|---|---|
| SandsCh | 24.30 | 21.35 | 2.95 | 13.82 | 6.96 | 40.1 | 42.23 |
| Chna Utd Coms | 5.20 | 4.74 | 0.46 | 9.70 | 1.03 | 24.7 | 40.16 |
| PingAnIns | 52.95 | 46.80 | 6.15 | 13.14 | 9.10 | 20.8 | 52.81 |
| Prudential | 1085.50 | 1030.50 | 55.00 | 5.34 | 157.10 | 16.9 | 29.53 |
| SHOP | 57.24 | 57.96 | -0.72 | -1.24 | 8.06 | 16.4 | 31.89 |
| ChUncHK | 4.78 | 4.51 | 0.27 | 5.99 | 0.65 | 15.7 | 36.96 |
| ChinaMBank | 41.90 | 38.50 | 3.40 | 8.83 | 5.65 | 15.6 | 47.19 |
| Bausch Hlth | 10.52 | 10.68 | -0.16 | -1.50 | 1.38 | 15.1 | 10.84 |
| Tencent | 314.00 | 296.00 | 18.00 | 6.08 | 41.00 | 15.0 | 41.46 |
| Ch Rail Cons | 5.25 | 4.60 | 0.65 | 14.13 | 0.68 | 14.9 | 37.43 |
| HK Exc&Clr | 329.40 | 315.20 | 14.20 | 4.51 | 41.80 | 14.5 | 39.71 |
| Workday | 166.32 | 170.99 | -4.67 | -2.73 | 21.07 | 14.5 | 18.56 |
| Citic Secs | 16.76 | 15.52 | 1.24 | 7.99 | 1.98 | 13.4 | 27.90 |
| New Ch Life Ins | 19.50 | 18.14 | 1.36 | 7.50 | 2.30 | 13.4 | 43.38 |
| Netflix | 317.07 | 320.41 | -3.34 | -1.04 | 35.90 | 12.8 | 17.85 |
| ChinaLife | 12.60 | 11.82 | 0.78 | 6.60 | 1.38 | 12.3 | 43.51 |
| AIA | 83.40 | 79.65 | 3.75 | 4.71 | 8.85 | 11.9 | 33.09 |
| Fidelity NIS | 73.13 | 74.06 | -0.93 | -1.26 | 7.60 | 11.6 | 27.82 |
| ChinaPcIns | 18.68 | 17.44 | 1.24 | 7.11 | 1.94 | 11.6 | 35.71 |
| PngAnBnk | 13.53 | 12.90 | 0.63 | 4.88 | 1.36 | 11.2 | 25.05 |

Based on the FT Global 500 companies in local currency

## FT 500: BOTTOM 20

| | Close price | Prev price | Day change | Day change % | Week change | Week change % | Month change % |
|---|---|---|---|---|---|---|---|
| TrnCan | 58.25 | 58.19 | 0.06 | 0.10 | -7.72 | -11.7 | -3.01 |
| Salesforce | 139.05 | 144.56 | -5.51 | -3.81 | -14.64 | -9.5 | -4.97 |
| ValeroEngy | 122.93 | 127.07 | -4.14 | -3.26 | -11.91 | -8.8 | -5.30 |
| CanImp | 59.51 | 59.39 | 0.12 | 0.20 | -5.59 | -8.6 | -4.69 |
| Nissan Mt | 461.70 | 474.60 | -12.90 | -2.72 | -42.70 | -8.5 | -5.02 |
| Costco | 486.64 | 494.53 | -7.89 | -1.60 | -44.28 | -8.3 | 0.07 |
| Suncor En | 43.70 | 43.00 | 0.70 | 1.63 | -3.68 | -7.8 | -10.33 |
| TokioMarine | 2734.50 | 2753.00 | -18.50 | -0.67 | -209.50 | -7.1 | 1.81 |
| Firstrand | 62.40 | 61.24 | 1.16 | 1.89 | -4.56 | -6.8 | -4.51 |
| AmerMvl | 18.44 | 18.25 | 0.19 | 1.04 | -1.34 | -6.8 | -5.73 |
| Marathon Ptl | 114.01 | 118.23 | -4.22 | -3.57 | -7.91 | -6.5 | -3.66 |
| ArcherDan | 90.31 | 91.71 | -1.40 | -1.53 | -5.94 | -6.2 | -6.21 |
| Baxter | 51.85 | 53.22 | -1.37 | -2.57 | -3.34 | -6.1 | 2.85 |
| VF Cp | 30.47 | 33.22 | -2.75 | -8.28 | -1.94 | -6.0 | 12.42 |
| Cielo | 4.51 | 4.68 | -0.17 | -3.63 | -0.27 | -5.6 | -19.68 |
| BankAm | 34.81 | 36.08 | -1.28 | -3.53 | -2.06 | -5.6 | -3.00 |
| MitsubishiEle | 1344.50 | 1341.50 | 3.00 | 0.22 | -78.00 | -5.5 | 2.40 |
| Keyence | 56470.00 | 56850.00 | -380.00 | -0.67 | -3260.00 | -5.5 | 0.86 |
| Orange | 9.35 | 9.65 | -0.31 | -3.19 | -0.54 | -5.4 | -4.24 |
| Denso | 7283.00 | 7435.00 | -152.00 | -2.04 | -418.00 | -5.4 | -0.45 |

Based on the FT Global 500 companies in local currency

## BONDS: HIGH YIELD & EMERGING MARKET

| Dec 05 | Red date | Coupon | Ratings S* | Ratings M* | Ratings F* | Bid price | Bid yield | Day's chge yield | Mth's chge yield | Spread vs US |
|---|---|---|---|---|---|---|---|---|---|---|
| **High Yield US$** | | | | | | | | | | |
| HCA Inc. | 04/24 | 8.36 | BB- | Ba2 | BB | 113.75 | 4.24 | 0.00 | 0.12 | - |
| **High Yield Euro** | | | | | | | | | | |
| Aldesa Financial Services S.A. | 04/21 | 7.25 | - | - | B | 71.10 | 28.23 | 0.00 | 0.64 | 25.98 |
| **Emerging US$** | | | | | | | | | | |
| Peru | 03/19 | 7.13 | BBB+ | A3 | BBB+ | 104.40 | 2.60 | - | - | 0.34 |
| Colombia | 01/26 | 4.50 | - | Baa2 | BBB- | 109.50 | 2.33 | 0.16 | 0.52 | 1.28 |
| Brazil | 04/26 | 6.00 | - | Ba2 | BB- | 115.15 | 2.78 | -0.01 | 0.65 | 1.73 |
| Poland | 04/26 | 3.25 | - | A2 | A- | 111.22 | 0.98 | 0.03 | 0.16 | -0.07 |
| Mexico | 05/26 | 11.50 | - | Baa1 | BBB- | 149.00 | 1.61 | 0.00 | -0.12 | 0.56 |
| Turkey | 03/27 | 6.00 | - | Ba2 | BB+ | 101.26 | 5.82 | 0.00 | 0.17 | 3.07 |
| Turkey | 03/27 | 6.00 | - | B2 | BB- | 102.88 | 5.43 | 0.14 | 0.83 | 4.38 |
| Peru | 08/27 | 4.13 | BBB+ | A3 | BBB+ | 103.50 | 3.66 | 0.01 | -0.02 | 0.80 |
| Russia | 06/28 | 12.75 | - | Baa3 | BBB | 168.12 | 2.48 | 0.07 | 0.05 | - |
| Brazil | 02/47 | 5.63 | - | Ba2 | BB- | 101.48 | 5.52 | 0.08 | 0.80 | - |
| **Emerging Euro** | | | | | | | | | | |
| Brazil | 04/21 | 2.88 | BB- | Ba2 | BB- | 103.09 | 0.05 | 0.01 | -0.09 | -1.19 |
| Mexico | 04/23 | 2.75 | BBB+ | A3 | BBB+ | 107.76 | 0.76 | 0.00 | -0.07 | -1.56 |
| Mexico | 04/23 | 2.75 | - | Baa1 | BBB- | 106.48 | -0.26 | - | - | -0.36 |
| Bulgaria | 03/28 | 3.00 | BBB- | Baa2 | BBB | 117.04 | 1.00 | 0.02 | -0.15 | -1.42 |

Interactive Data Pricing and Reference Data LLC, an ICE Data Services company. US $ denominated bonds NY close; all other London close. *S - Standard & Poor's, M - Moody's, F - Fitch.

## BONDS: GLOBAL INVESTMENT GRADE

| Dec 05 | Red date | Coupon | Ratings S* | Ratings M* | Ratings F* | Bid price | Bid yield | Day's chge yield | Mth's chge yield | Spread vs US |
|---|---|---|---|---|---|---|---|---|---|---|
| **US$** | | | | | | | | | | |
| FleetBoston Financial Corp. | 01/28 | 6.88 | BBB+ | Baa1 | A- | 129.00 | 2.54 | -0.01 | -0.05 | - |
| The Goldman Sachs Group, Inc. | 02/28 | 5.00 | BBB+ | A3 | A | 117.21 | 2.47 | 0.00 | 0.32 | - |
| NationsBank Corp. | 03/28 | 6.80 | BBB+ | Baa1 | A- | 127.69 | 2.72 | -0.01 | 0.06 | - |
| GTE LLC | 04/28 | 6.94 | BBB+ | Baa2 | A- | 128.27 | 2.80 | 0.00 | -0.11 | - |
| United Utilities PLC | 08/28 | 6.88 | BBB | Baa1 | A- | 130.43 | 2.62 | -0.07 | -0.22 | - |
| Barclays Bank plc | 01/29 | 4.50 | A | A1 | A+ | 96.46 | 5.02 | 0.00 | 0.02 | - |
| **Euro** | | | | | | | | | | |
| Electricite de France (EDF) | 04/30 | 4.63 | A- | A3 | A- | 137.45 | 0.82 | -0.01 | 0.10 | - |
| The Goldman Sachs Group, Inc. | 02/31 | 3.00 | BBB+ | A3 | A | 124.42 | 0.68 | 0.00 | -0.11 | - |
| The Goldman Sachs Group, Inc. | 02/31 | 3.00 | BBB+ | A3 | A | 121.70 | 0.93 | 0.00 | 0.02 | - |
| Finland | 04/31 | 0.75 | AA+ | Aa1 | AA+ | 111.08 | -0.27 | 0.00 | -0.05 | -0.87 |
| **Yen** | | | | | | | | | | |
| Mexico | 06/26 | 1.09 | - | Baa1 | BBB- | 98.73 | 1.34 | -0.02 | -0.14 | 0.27 |
| **£ Sterling** | | | | | | | | | | |
| innogy Fin B.V. | 06/30 | 6.25 | BBB | Baa2 | A- | 137.45 | 2.19 | -0.03 | 0.02 | - |
| innogy Fin B.V. | 06/30 | 6.25 | BBB | Baa2 | A- | 128.68 | 3.20 | 0.00 | -0.01 | 0.40 |

Interactive Data Pricing and Reference Data LLC, an ICE Data Services company. US $ denominated bonds NY close; all other London close. *S - Standard & Poor's, M - Moody's, F - Fitch.

## INTEREST RATES: OFFICIAL

| Dec 05 | Rate | Current | Since | Last |
|---|---|---|---|---|
| US | Fed Funds | 3.00-3.25 | 21-09-2022 | 2.25-2.5 |
| US | Prime | 6.25 | 22-09-2022 | 5.50 |
| US | Discount | 3.25 | 22-09-2022 | 2.50 |
| Euro | Repo | 0.53 | 01-11-2022 | 0.374 |
| UK | Repo | 3.00 | 02-11-2022 | 2.25 |
| Japan | O'night Call | 0.00-0.10 | 01-02-2016 | 0.00 |
| Switzerland | Libor Target | -1.25-0.25 | 15-01-2015 | -0.75--0.25 |

## INTEREST RATES: MARKET

| Dec 05 (Libor: Dec 02) | Over night | Change Day | Change Week | Change Month | One month | Three month | Six month | One year |
|---|---|---|---|---|---|---|---|---|
| US$ Libor | 3.81543 | -0.009 | 2.890 | 0.013 | 4.18486 | 4.73257 | 5.14914 | 5.42943 |
| Euro Libor | -0.64957 | -0.064 | -0.224 | 0.001 | -0.61943 | -0.58057 | -0.55600 | -0.48571 |
| £ Libor | 0.18063 | -0.005 | -0.043 | 0.001 | 3.29000 | 3.67780 | 4.21840 | 0.81363 |
| Swiss Fr Libor | | | | -0.002 | -0.77540 | -0.75300 | -0.70280 | -0.55320 |
| Yen Libor | | | | 0.000 | -0.06005 | -0.04960 | 0.03097 | 0.04867 |
| Euro Euribor | | | | -0.012 | 1.51400 | 1.97500 | 2.40600 | 2.81100 |
| Sterling CDs | | | | 0.000 | 0.50000 | 0.63000 | 0.78500 | |
| US$ CDs | | | | 0.020 | 4.22000 | 4.63000 | 5.05000 | |
| Euro CDs | | | | 0.030 | 1.51000 | 1.90000 | 2.31000 | |

| Dec 05 | Short term | | 7 Days notice | | One month | | Three month | | Six month | | One year | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Euro | 1.15 | 1.45 | 1.20 | 1.50 | 1.36 | 1.66 | 1.75 | 2.05 | 2.16 | 2.46 | 2.45 | 2.75 |
| Sterling | | | | | 0.45 | 0.55 | 0.58 | 0.68 | 0.71 | 0.86 | 0.90 | 1.05 |
| US Dollar | 3.63 | 3.83 | 3.65 | 3.85 | 4.12 | 4.32 | 4.53 | 4.73 | 4.95 | 5.15 | 5.20 | 5.40 |
| Japanese Yen | -0.15 | 0.05 | -0.20 | 0.00 | -0.20 | 0.00 | -0.15 | 0.05 | -0.10 | 0.20 | -0.05 | 0.25 |

Libor rates come from ICE (see www.theice.com) and are fixed at 11am UK time. Other data sources: US $, Euro & CDs: Tullett Prebon; SDR, US Discount: IMF; EONIA: ECB; Swiss Libor: SNB; EURONIA, RONIA & SONIA: WMBA.

## BOND INDICES

| | Index | Day's change | Month's change | Year change | Return 1 month | Return 1 year |
|---|---|---|---|---|---|---|
| **Markit IBoxx** | | | | | | |
| ABF Pan-Asia unhedged | 199.69 | 1.20 | 1.20 | -9.15 | 6.40 | -8.86 |
| Corporates( £) | 329.89 | 0.40 | 0.40 | -16.65 | 3.95 | -17.46 |
| Corporates(€) | 212.68 | 0.80 | 0.80 | -11.94 | 3.36 | -12.09 |
| Eurozone Sov(€) | 219.35 | 0.87 | 0.87 | -13.79 | 3.07 | -14.98 |
| Gilts( £) | 283.11 | 0.41 | 0.41 | -21.24 | 2.71 | -23.20 |
| Overall( £) | 290.18 | 0.40 | 0.40 | -19.84 | 2.84 | -21.52 |
| Overall(€) | 213.64 | 0.82 | 0.82 | -13.39 | 3.04 | -14.32 |
| **FTSE** | | | | | | |
| Sterling Corporate (£) | - | - | - | - | - | - |
| Euro Corporate (€) | 104.47 | -0.05 | - | - | 0.54 | -1.73 |
| Euro Emerging Mkts (€) | 703.21 | 14.21 | - | - | 16.07 | -9.55 |
| Eurozone Govt Bond | 110.04 | -0.19 | - | - | -0.34 | -0.64 |

**CREDIT INDICES**

| | Index | Day's change | Week's change | Month's change | Series high | Series low |
|---|---|---|---|---|---|---|
| **Markit iTraxx** | | | | | | |
| Crossover 5Y | 456.11 | 11.51 | -7.53 | -76.07 | 688.92 | 434.12 |
| Europe 5Y | 89.78 | 2.02 | -2.20 | -19.38 | 142.08 | 85.48 |
| Japan 5Y | 76.71 | 0.07 | -3.22 | -26.19 | 119.29 | 75.61 |
| Senior Financials 5Y | 99.29 | 1.48 | -2.77 | -19.44 | 155.06 | 94.99 |
| **Markit CDX** | | | | | | |
| Emerging Markets 5Y | 231.04 | 2.67 | -0.59 | -51.33 | 335.29 | 226.18 |
| Nth Amer High Yld 5Y | 463.34 | 5.28 | 2.94 | -59.71 | 625.47 | 452.57 |
| Nth Amer Inv Grade 5Y | 77.70 | 0.79 | -0.30 | -12.34 | 110.98 | 75.62 |

Websites: markit.com, ftse.com. All indices shown are unhedged. Currencies are shown in brackets after the index names.

## VOLATILITY INDICES

| | Dec 05 | Day Chng | Prev | 52 wk high | 52 wk low |
|---|---|---|---|---|---|
| VIX | 20.49 | 1.43 | 19.06 | 38.93 | 16.62 |
| VXD | 19.99 | 1.29 | 18.70 | 45.37 | 3.27 |
| VXN | 26.11 | 1.33 | 24.78 | 44.05 | 9.94 |
| VDAX | 20.60 | 0.27 | 20.33 | 93.30 | - |

† CBOE. VIX: S&P 500 index Options Volatility, VXD: DJIA Index Options Volatility, VXN: NASDAQ Index Options Volatility. ‡ Deutsche Borse. VDAX: DAX Index Options Volatility.

## BONDS: BENCHMARK GOVERNMENT

| | Red Date | Coupon | Bid Price | Bid Yield | Day chg yield | Wk chg yield | Month chg yld | Year chg yld |
|---|---|---|---|---|---|---|---|---|
| Australia | - | - | - | - | - | - | - | - |
| | 05/32 | 1.25 | 82.85 | 3.38 | -0.09 | -0.18 | -0.14 | - |
| | 02/50 | 1.00 | 105.41 | 1.24 | -0.09 | -0.41 | -0.19 | 0.92 |
| Austria | 02/29 | 0.50 | 89.89 | 2.26 | 0.04 | -0.14 | -0.09 | 2.55 |
| | 02/47 | 1.50 | 83.67 | 2.40 | -0.02 | -0.18 | -0.11 | 2.09 |
| Belgium | 06/27 | 0.80 | 94.35 | 2.12 | 0.05 | -0.15 | -0.09 | 2.57 |
| | 06/47 | 1.60 | 81.50 | 2.63 | 0.00 | -0.15 | -0.09 | 2.03 |
| Canada | 03/25 | 1.25 | 94.88 | 3.65 | -0.04 | -0.13 | -0.17 | 2.46 |
| | 06/30 | 1.25 | 89.75 | 2.78 | -0.05 | -0.12 | -0.20 | 1.38 |
| | 12/48 | 2.75 | 98.78 | 2.82 | -0.09 | -0.15 | -0.24 | 1.04 |
| Denmark | 11/29 | 0.50 | 89.85 | 2.08 | 0.06 | -0.15 | -0.07 | 2.31 |
| | 11/52 | 0.25 | 64.73 | 1.78 | 0.01 | -0.15 | -0.07 | 1.66 |
| Finland | 09/24 | 0.00 | 96.29 | 2.15 | 0.06 | -0.04 | -0.08 | 2.83 |
| | 09/29 | 0.50 | 88.67 | 2.33 | 0.04 | -0.11 | -0.08 | 2.62 |
| France | 05/28 | 0.75 | 93.00 | 2.12 | 0.04 | -0.15 | -0.10 | 2.46 |
| | 05/48 | 2.00 | 89.66 | 2.56 | 0.00 | -0.13 | -0.08 | 2.01 |
| Germany | 08/29 | 0.00 | 88.71 | 1.81 | 0.05 | -0.14 | -0.09 | 2.32 |
| | 08/50 | 0.00 | 63.89 | 1.63 | -0.03 | -0.17 | -0.12 | 1.73 |
| Greece | 01/23 | 3.50 | 100.31 | 1.39 | -0.08 | 0.06 | 0.03 | 1.70 |
| | 01/28 | 3.75 | 103.07 | 3.09 | 0.03 | -0.24 | -0.23 | 2.49 |
| Ireland | - | - | - | - | - | - | - | - |
| | 05/26 | 1.00 | 96.66 | 2.02 | 0.04 | -0.17 | -0.10 | 2.46 |
| | 02/45 | 2.00 | 90.55 | 2.56 | 0.00 | -0.12 | -0.09 | 2.05 |
| Italy | 02/25 | 0.35 | 95.28 | 2.62 | 0.05 | -0.11 | -0.11 | 2.69 |
| | 05/30 | 0.40 | 94.09 | 1.23 | 0.06 | -0.21 | -0.16 | 1.94 |
| | 03/48 | 3.45 | 94.39 | 3.80 | 0.04 | -0.04 | -0.07 | 2.08 |
| Japan | 04/25 | 0.05 | 99.95 | 0.07 | 0.00 | 0.00 | -0.01 | 0.01 |
| | 12/29 | 0.10 | 99.25 | 0.21 | 0.01 | 0.02 | -0.01 | 0.26 |
| | 12/49 | 0.40 | 77.69 | 1.39 | -0.01 | 0.03 | -0.01 | 0.73 |
| Netherlands | 07/27 | 0.75 | 94.60 | 1.99 | 0.06 | -0.13 | -0.07 | 2.52 |
| | 01/47 | 2.75 | 115.17 | 1.95 | -0.01 | -0.15 | -0.09 | 1.98 |
| New Zealand | 05/31 | 1.50 | 82.14 | 4.01 | -0.10 | -0.16 | -0.12 | 1.64 |
| | 09/40 | 2.50 | 123.17 | 2.15 | -0.09 | -0.20 | -0.11 | 1.37 |
| Norway | 08/30 | 1.38 | 88.11 | 3.14 | 0.01 | -0.03 | -0.02 | 1.74 |
| Poland | 01/23 | 2.50 | 99.34 | 7.41 | -0.05 | 0.31 | 0.11 | 4.67 |
| | 07/27 | 2.50 | 83.90 | 6.65 | -0.02 | -0.51 | -0.22 | 3.25 |
| | 04/47 | 4.00 | 63.69 | 7.20 | 0.00 | -0.45 | -0.35 | 3.68 |
| Portugal | 04/27 | 4.13 | 107.80 | 2.22 | 0.05 | -0.13 | -0.09 | 2.51 |
| Spain | - | - | - | - | - | - | - | - |
| | 10/29 | 0.60 | 87.78 | 2.55 | 0.04 | -0.09 | -0.09 | 2.43 |
| | 10/46 | 2.90 | 96.39 | 3.12 | 0.03 | -0.07 | -0.06 | 2.08 |
| Sweden | 06/30 | 0.13 | 117.25 | -0.26 | 0.00 | 0.00 | 0.00 | 1.83 |
| | 03/39 | 3.50 | 125.77 | 1.68 | -0.01 | -0.14 | -0.14 | 1.31 |
| Switzerland | 04/28 | 4.00 | 115.79 | 0.95 | 0.03 | -0.01 | -0.04 | 1.40 |
| | 06/29 | 0.00 | 93.98 | 0.95 | 0.03 | -0.02 | -0.04 | 1.33 |
| United Kingdom | 07/23 | 0.75 | 98.47 | 3.22 | 0.03 | 0.05 | 0.02 | 2.82 |
| | 07/27 | 1.25 | 91.30 | 3.29 | 0.07 | -0.01 | 0.01 | 2.71 |
| | 07/47 | 1.50 | 66.01 | 3.59 | 0.09 | 0.16 | 0.08 | 2.64 |
| United States | - | - | - | - | - | - | - | - |
| | 03/25 | 0.50 | 92.07 | 4.12 | 0.02 | -0.22 | -0.11 | 3.12 |
| | 02/30 | 1.50 | 87.15 | 3.54 | 0.00 | -0.20 | -0.16 | 2.15 |
| | 02/50 | 0.25 | 76.08 | 1.30 | -0.13 | -0.27 | -0.34 | - |

Interactive Data Pricing and Reference Data LLC, an ICE Data Services company.

## GILTS: UK CASH MARKET

| Dec 05 | Price £ | Red Yield | Change in Yield Day | Change in Yield Week | Change in Yield Month | Change in Yield Year | 52 Week High | 52 Week Low | Amnt £m |
|---|---|---|---|---|---|---|---|---|---|
| | - | - | - | - | - | - | - | - | - |
| Tr 0.75pc '23 | 98.50 | 3.18 | -0.31 | 1.60 | 14.39 | 783.33 | 100.82 | 97.34 | 34.36 |
| Tr 0.125pc '24 | 96.40 | 3.33 | -1.48 | 0.60 | 11.37 | 579.59 | 99.44 | 94.34 | 35.55 |
| Tr 2pc '25 | 96.78 | 3.23 | -1.22 | 2.87 | 6.25 | 546.00 | 105.86 | 93.15 | 39.93 |
| Tr 0.125pc '26 | 91.15 | 3.10 | -0.96 | 0.00 | -2.82 | 496.15 | 98.77 | 86.33 | 35.32 |
| Tr 1.25pc '27 | 91.57 | 3.23 | -1.22 | 0.00 | -4.44 | 487.27 | 104.30 | 85.65 | 40.99 |
| Tr 0.875pc '29 | 86.18 | 3.12 | -2.19 | -0.95 | -8.77 | 380.00 | 102.36 | 78.21 | 43.62 |
| Tr 4.25pc '32 | 109.47 | 3.09 | -2.22 | -0.32 | -11.21 | 291.14 | 135.62 | 98.13 | 40.33 |
| Tr 4.25pc '36 | 109.30 | 3.37 | -2.60 | -0.30 | -11.08 | 282.95 | 145.94 | 94.91 | 31.68 |
| Tr 4.5pc '42 | 114.00 | 3.52 | -1.95 | 1.73 | -9.04 | 286.81 | 169.96 | 93.79 | 28.35 |
| Tr 3.75pc '52 | 105.51 | 3.45 | -1.99 | 2.99 | -6.25 | 301.16 | 180.27 | 82.51 | 25.11 |
| Tr 4pc '60 | 116.69 | 3.23 | -2.12 | 2.54 | -7.18 | 336.49 | 213.01 | 87.32 | 25.13 |

Gilts benchmarks & non-rump undated stocks. Closing mid-price in pounds per £100 nominal of stock.

## GILTS: UK FTSE ACTUARIES INDICES

| Price Indices Fixed Coupon | Dec 05 | Day's chg % | Total Return | Return 1 month | Return 1 year | Yield |
|---|---|---|---|---|---|---|
| 1 Up to 5 Years | 81.81 | 0.09 | 2353.40 | 0.43 | -4.53 | 3.25 |
| 2 5 - 10 Years | 151.01 | 0.42 | 3213.93 | 3.13 | -13.78 | 3.15 |
| 3 10 - 15 Years | 165.05 | 0.87 | 3792.32 | 6.21 | -20.70 | 3.34 |
| 4 5 - 15 Years | 153.53 | 0.55 | 3353.74 | 3.97 | -16.00 | 3.22 |
| 5 Over 15 Years | 234.74 | 1.36 | 4041.78 | 8.45 | -38.42 | 3.37 |
| 7 All stocks | 141.30 | 0.68 | 3155.98 | 4.34 | -23.06 | 3.32 |

| Index Linked | Dec 05 | Day's chg % | Month chg % | Year's chg % | Total Return | Return 1 month | Return 1 year |
|---|---|---|---|---|---|---|---|
| 1 Up to 5 Years | 326.69 | 0.22 | 0.19 | 2.66 | 2762.39 | 0.45 | 3.84 |
| 2 Over 5 years | 576.58 | 0.68 | 4.40 | -38.76 | 4394.86 | 4.54 | -38.49 |
| 3 5-15 years | 465.83 | 0.50 | 3.74 | -16.05 | 3767.51 | 3.91 | -15.41 |
| 4 Over 15 years | 662.84 | 0.80 | 4.62 | -47.50 | 4904.95 | 4.74 | -47.34 |
| 5 All stocks | 541.80 | 0.61 | 3.78 | -34.67 | 4213.01 | 3.93 | -34.32 |

| Yield Indices | Dec 05 | Dec 02 | Yr ago | | Dec 05 | Dec 02 | Yr ago |
|---|---|---|---|---|---|---|---|
| 5 Yrs | 3.09 | 3.14 | 0.49 | 20 Yrs | 3.52 | 3.59 | 0.92 |
| 10 Yrs | 3.24 | 3.32 | 0.74 | 45 Yrs | 3.08 | 3.16 | 0.58 |
| 15 Yrs | 3.45 | 3.53 | 0.89 | | | | |

| Real yield | inflation 0% Dec 05 | Dur yrs | Previous | Yr ago | inflation 5% Dec 05 | Dur yrs | Previous | Yr ago |
|---|---|---|---|---|---|---|---|---|
| Up to 5 yrs | -0.37 | 2.80 | -0.29 | -3.91 | -0.71 | 2.82 | -0.63 | -4.29 |
| Over 5 yrs | 0.11 | 20.28 | 0.14 | -2.64 | 0.08 | 20.34 | 0.12 | -2.66 |
| 5-15 yrs | -0.15 | 9.75 | -0.10 | -3.23 | -0.23 | 9.76 | -0.18 | -3.32 |
| Over 15 yrs | 0.17 | 26.86 | 0.20 | -2.57 | 0.16 | 26.87 | 0.19 | -2.58 |
| All stocks | 0.10 | 17.54 | 0.13 | -2.65 | 0.06 | 17.61 | 0.10 | -2.68 |

See FTSE website for more details www.ftse.com/products/indices/gilts
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## COMMODITIES

www.ft.com/commodities

| Energy | | Price* | Change | Agricultural & Cattle Futures | | Price* | Change |
|---|---|---|---|---|---|---|---|
| Crude Oil† | Jan | 82.35 | 2.37 | Corn♦ | Dec | 637.25 | 2.25 |
| Brent Crude Oil‡ | | 84.75 | -0.82 | Wheat♦ | Dec | 738.50 | -20.25 |
| RBOB Gasoline† | Jan | 2.34 | 0.06 | Soybeans♦ | Jan | 1448.00 | 9.50 |
| Natural Gas† | Jan | 5.83 | -0.45 | Soybeans Meal♦ | Dec | 425.80 | 1.30 |
| **Base Metals (♠ LME 3 Months)** | | | | Cocoa (ICE Liffe)✠ | Dec | 2116.00 | -28.00 |
| Aluminium | | 2558.50 | 2.50 | Cocoa (ICE US)♥ | Dec | 2497.00 | 25.00 |
| Aluminium Alloy | | 1675.00 | -905.00 | Coffee(Robusta)✠ | Jan | 1904.00 | 16.00 |
| Copper | | 8464.50 | -7.50 | Coffee (Arabica)♥ | Dec | 161.45 | -1.90 |
| Lead | | 2229.00 | 16.00 | White Sugar✠ | | 539.80 | 6.90 |
| Nickel | | 28950.00 | 800.00 | Sugar 11♥ | | 19.86 | 0.38 |
| Tin | | 24445.00 | 875.00 | Cotton♥ | Mar | 84.84 | 1.64 |
| Zinc | | 3121.00 | 14.00 | Orange Juice♥ | Jan | 204.00 | 0.45 |
| **Precious Metals (PM London Fix)** | | | | Live Cattle♣ | Dec | 153.25 | 0.20 |
| Gold | | 1784.75 | -18.40 | Feeder Cattle♣ | May | 134.88 | - |
| Silver (US cents) | | 2260.50 | 47.00 | Lean Hogs♣ | Dec | 82.45 | -0.68 |
| Platinum | | 1007.00 | -34.00 | | | | |
| Palladium | | 1874.00 | -30.00 | | Dec 02 | % Chg Month | % Chg Year |
| **Bulk Commodities** | | | | | | | |
| Iron Ore | | 107.44 | 4.34 | S&P GSCI Spt | 602.17 | -9.61 | 14.63 |
| Baltic Dry Index | | 1323.00 | -1.00 | DJ UBS Spot | 112.25 | -4.48 | 17.15 |
| Richards Bay ICE Futures | | 246.95 | -1.05 | TR/CC CRB TR | 299.18 | -1.07 | 28.20 |
| | | | | LEBA EUA Carbon | 58.91 | -1.98 | 129.94 |
| | | | | LEBA UK Power | 1048.00 | -37.43 | -39.60 |

Sources: † NYMEX, ‡ ECX/ICE, ♦ CBOT, ✠ ICE Liffe, ♥ ICE Futures, ♣ CME, ♠ LME/London Metal Exchange.* Latest prices, $ unless otherwise stated.

## BONDS: INDEX-LINKED

| | Price Dec 02 | Yield Dec 02 | Yield Prev | Month return | Value stock | Market | No of stocks |
|---|---|---|---|---|---|---|---|
| Can 4.25%' 26 | 112.17 | 1.123 | 1.189 | 0.99 | 5.25 | 75710.49 | 8 |
| Fr 0.25%' 24 | 103.12 | -1.613 | -1.644 | 0.20 | 17.92 | 262250.28 | 17 |
| Swe 1.00%' 25 | 125.69 | -0.215 | -0.215 | 0.02 | 35.38 | 219879.22 | 6 |
| UK 0.125%' 24 | 103.88 | -2.780 | -3.022 | -0.02 | 15.24 | 593155.85 | 31 |
| UK 2.50%' 24 | 377.57 | -0.656 | -0.776 | 0.01 | 6.82 | 593155.85 | 31 |
| UK 2.00%' 35 | 253.05 | -0.078 | -0.172 | -0.25 | 9.08 | 593155.85 | 31 |
| US 0.625%' 24 | 98.22 | 2.249 | 2.326 | 0.22 | 40.98 | 1667482.88 | 47 |
| US 3.625%' 28 | 112.11 | 1.282 | 1.357 | 1.26 | 16.78 | 1667482.88 | 47 |

Representative stocks from each major market Source: Merill Lynch Global Bond Indices † Local currencies. ‡ Total market value. In line with market convention, for UK Gilts inflation factor is applied to price, for other markets it is applied to par amount.

## BONDS: TEN YEAR GOVT SPREADS

| | Bid Yield | Spread vs Bund | Spread vs T-Bonds | | Bid Yield | Spread vs Bund | Spread vs T-Bonds |
|---|---|---|---|---|---|---|---|
| Australia | 3.38 | 1.58 | -0.16 | Netherlands | 1.99 | 0.18 | -1.55 |
| Austria | 2.26 | 0.46 | -1.28 | New Zealand | 4.01 | 2.21 | 0.47 |
| Canada | 2.78 | 0.97 | -0.76 | Norway | 3.14 | 1.33 | -0.40 |
| Denmark | 2.08 | 0.28 | -1.46 | Portugal | 2.22 | 0.42 | -1.32 |
| Finland | 2.33 | 0.52 | -1.21 | Spain | 2.55 | 0.75 | -0.99 |
| Germany | 1.81 | 0.00 | -1.73 | Sweden | -0.26 | -2.06 | -3.80 |
| Italy | 1.23 | -0.57 | -2.31 | Switzerland | 0.95 | -0.85 | -2.59 |
| Japan | 0.21 | -1.60 | -3.33 | United States | 3.54 | 1.73 | 0.00 |

Interactive Data Pricing and Reference Data LLC, an ICE Data Services company.

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# MANAGED FUNDS SERVICE

### abrdn Capital (CI) Limited (JER)
PO Box 189, St Helier, Jersey, JE4 9RU 01534 709130
**FCA Recognised**
**abrdn Capital Offshore Strategy Fund Limited**

| Fund | Bid | Offer | D+/- | Yield |
|---|---|---|---|---|
| Bridge Fund | £ 2.2048 | - | 0.0034 | 1.89 |
| Global Equity Fund | £ 3.2927 | - | 0.0045 | 1.19 |
| Global Fixed Interest Fund | £ 0.7567 | - | 0.0018 | 5.56 |
| Income Fund | £ 0.6360 | - | 0.0007 | 3.17 |
| Sterling Fixed Interest Fund | £ 0.6917 | - | -0.0020 | 3.74 |
| UK Equity Fund | £ 2.0006 | - | 0.0077 | 3.76 |

### Algebris Investments (IRL)
**Regulated**

| Fund | Bid | Offer | D+/- | Yield |
|---|---|---|---|---|
| Algebris Financial Credit I EUR | € 173.21 | - | 0.39 | 0.00 |
| Algebris Financial Credit R EUR | € 149.02 | - | 0.33 | 0.00 |
| Algebris Financial Credit Rd EUR | € 91.18 | - | 0.20 | 5.59 |
| Algebris Financial Income I EUR | € 178.46 | - | -0.57 | 0.00 |
| Algebris Financial Income R EUR | € 162.41 | - | -0.51 | 0.00 |
| Algebris Financial Income Rd EUR | € 99.54 | - | -0.31 | 4.16 |
| Algebris Financial Equity B EUR | € 161.81 | - | -0.28 | 0.00 |
| Algebris Financial Equity R EUR | € 136.09 | - | -0.24 | 0.00 |
| Algebris IG Financial Credit I EUR | € 95.82 | - | 0.09 | 0.00 |
| Algebris IG Financial Credit R EUR | € 94.35 | - | 0.09 | 0.00 |
| Algebris Global Credit Opportunities I EUR | € 124.64 | - | 0.19 | 0.00 |
| Algebris Global Credit Opportunities R EUR | € 121.67 | - | 0.18 | - |
| Algebris Global Credit Opportunities Rd EUR | € 106.96 | - | 0.16 | - |
| Algebris Core Italy I EUR | € 142.21 | - | -0.07 | 0.00 |
| Algebris Core Italy R EUR | € 135.00 | - | -0.07 | 0.00 |

### The Antares European Fund Limited
**Other International**

| Fund | Bid | Offer | D+/- | Yield |
|---|---|---|---|---|
| AEF Ltd Usd | $ 562.26 | - | 10.91 | 0.00 |
| AEF Ltd Eur | € 518.24 | - | 10.01 | 0.00 |

### Artemis Fund Managers Ltd (1200)F (UK)
57 St. James's Street, London SW1A 1LD 0800 092 2051
**Authorised Inv Funds**

| Fund | Bid | Offer | D+/- | Yield |
|---|---|---|---|---|
| Artemis Corporate Bond I Acc | 99.00 | - | 0.23 | 2.90 |
| Artemis Positive Future Fund | 69.20 | - | 0.48 | 0.00 |
| Artemis Target Return Bond I Acc | 104.44 | - | 0.10 | 2.79 |

### Ashmore Group
61 Aldwych, London WC2B 4AE. Dealing team: +352 27 62 22 233
**Authorised Inv Funds**

| Fund | Bid | Offer | D+/- | Yield |
|---|---|---|---|---|
| Emerging Markets Equity Fund | $ 116.93 | - | 0.30 | 0.00 |
| Emerging Markets Equity ESG Fund | $ 131.56 | - | -0.03 | 0.00 |
| Emerging Markets Frontier Equity Fund | $ 181.96 | - | 1.88 | 0.39 |
| Emerging Markets Blended Debt Fund | $ 52.65 | - | 0.22 | 6.26 |
| Emerging Markets Blended Debt ESG Fund | $ 84.38 | - | 0.32 | 0.00 |
| Emerging Markets Active Equity Fund | $ 119.89 | - | 0.38 | 0.00 |
| Emerging Markets Corporate Debt Fund | $ 59.28 | - | 0.27 | 9.48 |
| Emerging Markets Debt Fund | $ 57.99 | - | 0.28 | 7.52 |
| Emerging Markets Local Currency Bond Fund | $ 60.21 | - | 0.29 | 4.18 |

### Atlantas Sicav (LUX)
**Regulated**

| Fund | Bid | Offer | D+/- | Yield |
|---|---|---|---|---|
| American Dynamic | $ 6410.60 | - | 28.36 | 0.00 |
| American One | $ 6627.77 | - | 32.43 | 0.00 |
| Bond Global | € 1581.48 | 1581.48 | 10.04 | 0.00 |
| Eurocroissance | € 1316.58 | - | 5.30 | - |
| Far East | $ 968.99 | - | 29.71 | 0.00 |

### Blue Whale Investment Funds ICAV (IRE)
www.bluewhale.co.uk, info@bluewhale.co.uk
**FCA Recognised - Ireland UCITS**

| Fund | Bid | Offer | D+/- | Yield |
|---|---|---|---|---|
| Blue Whale Growth USD T | $ 9.00 | - | -0.09 | 0.00 |

### Brooks Macdonald International Fund Managers Limited (JER)
5 Anley Street, St Helier, Jersey, JE2 3QE
+44 (0) 1534 700 104 (Int.) +44 (0) 800 735 8000 (UK)
**Brooks Macdonald International Investment Funds Limited**

| Fund | Bid | Offer | D+/- | Yield |
|---|---|---|---|---|
| Euro High Income | € 1.2346 | - | -0.0023 | 2.50 |
| High Income | £ 0.6613 | - | -0.0010 | 3.77 |
| Sterling Bond | £ 1.2648 | - | -0.0015 | 2.06 |

**Brooks Macdonald International Multi Strategy Fund Limited**

| Fund | Bid | Offer | D+/- | Yield |
|---|---|---|---|---|
| Balanced Strategy A | £ 0.9163 | - | -0.0033 | 0.57 |
| Balanced Strategy | £ 0.9155 | - | -0.0032 | 0.09 |
| Cautious Balanced Strategy A | £ 0.8918 | - | -0.0022 | 1.12 |
| Growth Strategy A | £ 0.9200 | - | -0.0047 | - |
| High Growth Strategy A | £ 0.9142 | - | -0.0051 | 0.12 |
| Cautious Balanced Strategy | £ 1.2472 | - | -0.0031 | 0.00 |
| Growth Strategy | £ 1.9252 | - | -0.0098 | 0.00 |
| High Growth Strategy | £ 2.6809 | - | -0.0152 | 0.00 |
| US$ Growth Strategy | $ 1.6686 | - | -0.0027 | 0.00 |

Dealing Daily. Initial Charge Nil for A classes and up to 2% for other classes

### CG Asset Management Limited (IRL)
25 Moorgate, London, EC2R 6AY
Dealing: Tel. +353 1434 5098 Fax. +353 1542 2859
**FCA Recognised**
**CG Portfolio Fund Plc**

| Fund | Bid | Offer | D+/- | Yield |
|---|---|---|---|---|
| Absolute Return Cls M Inc | £ 136.11 | 136.72 | 0.43 | 1.65 |
| Capital Gearing Portfolio GBP P | £ 37514.69 | 37721.54 | 122.29 | 1.66 |
| Capital Gearing Portfolio GBP V | £ 182.45 | 183.46 | 0.60 | 1.66 |
| Dollar Fund Cls D Inc | £ 170.16 | 170.16 | 4.08 | 1.20 |
| Dollar Hedged GBP Inc | £ 94.03 | 94.03 | 1.59 | 1.21 |
| Real Return Cls A Inc | £ 203.94 | 204.55 | 2.64 | 1.68 |

### Chartered Asset Management Pte Ltd
**Other International Funds**

| Fund | Bid | Offer | D+/- | Yield |
|---|---|---|---|---|
| CAM-GTF VCC | $ 284820.86 | 284820.86 | 7885.91 | - |
| CAM GTi VCC | $ 780.49 | - | -32.39 | - |
| RAIC VCC | $ 1.64 | 1.64 | 0.03 | 2.06 |

### Dodge & Cox Worldwide Funds (IRL)
48-49 Pall Mall, London SW1Y 5JG.
www.dodgeandcox.worldwide.com 020 3713 7664
**FCA Recognised**
**Dodge & Cox Worldwide Funds plc - Global Bond Fund**

| Fund | Bid | Offer | D+/- | Yield |
|---|---|---|---|---|
| EUR Accumulating Class | € 15.88 | - | 0.01 | 0.00 |
| EUR Accumulating Class (H) | € 10.42 | - | 0.02 | - |
| EUR Distributing Class | € 11.64 | - | 0.01 | 0.96 |
| EUR Distributing Class (H) | € 7.57 | - | 0.01 | - |
| GBP Distributing Class | £ 12.24 | - | -0.01 | 0.86 |
| GBP Distributing Class (H) | £ 8.10 | - | 0.01 | 1.11 |
| USD Accumulating Class | $ 12.07 | - | 0.02 | 0.00 |

**Dodge & Cox Worldwide Funds plc-Global Stock Fund**

| Fund | Bid | Offer | D+/- | Yield |
|---|---|---|---|---|
| USD Accumulating Share Class | $ 29.06 | - | 0.12 | - |
| GBP Accumulating Share Class | £ 38.93 | - | 0.05 | 0.00 |
| GBP Distributing Share class | £ 26.27 | - | 0.03 | - |
| EUR Accumulating Share Class | € 41.44 | - | 0.14 | - |
| GBP Distributing Class (H) | £ 13.49 | - | 0.05 | 0.53 |

**Dodge & Cox Worldwide Funds plc-U.S. Stock Fund**

| Fund | Bid | Offer | D+/- | Yield |
|---|---|---|---|---|
| USD Accumulating Share Class | $ 39.19 | - | 0.04 | 0.00 |
| GBP Accumulating Share Class | £ 49.64 | - | -0.10 | 0.00 |
| GBP Distributing Share Class | £ 29.80 | - | -0.06 | 0.16 |
| EUR Accumulating Share Class | € 48.25 | - | 0.01 | 0.00 |
| GBP Distributing Class (H) | £ 15.56 | - | 0.01 | 0.19 |

### Dragon Capital
www.dragoncapital.com
Fund information:info@dragoncapital.com
**Other International Funds**

| Fund | Bid | Offer | D+/- | Yield |
|---|---|---|---|---|
| Vietnam Equity (UCITS) Fund A USD | $ 25.01 | - | 0.48 | 0.00 |

### EdenTree Investment Management Ltd (UK)
PO Box 3733, Swindon, SN4 4BG, 0800 358 3010
**Authorised Inv Funds**

| Fund | Bid | Offer | D+/- | Yield |
|---|---|---|---|---|
| EdenTree Short Dated Bond Cls B | 93.24 | - | -0.14 | 0.95 |

### Euronova Asset Management UK LLP (CYM)
**Regulated**

| Fund | Bid | Offer | D+/- | Yield |
|---|---|---|---|---|
| Smaller Cos Cls One Shares | € 51.74 | - | -0.11 | 0.00 |
| Smaller Cos Cls Two Shares | € 33.03 | - | -0.07 | 0.00 |
| Smaller Cos Cls Three Shares | € 16.48 | - | -0.04 | 0.00 |
| Smaller Cos Cls Four Shares | € 21.73 | - | -0.04 | 0.00 |

### Fidelity Investments International
**Other International Funds**

| Fund | Bid | Offer | D+/- | Yield |
|---|---|---|---|---|
| Emerging Mkts NAV | £ 7.21 | - | -0.16 | 1.91 |

### FIL Investment Services (UK) Limited (1200)F (UK)
Beech Gate, Millfield Lane, Lower Kingswood, Tadworth, KT20 6RP
Callfree: Private Clients 0800 414161
Broker Dealings: 0800 414 181
**OEIC Funds**

| Fund | Bid | Offer | D+/- | Yield |
|---|---|---|---|---|
| Sustainable Multi Asset Balanced Fund W-ACC-GBP | £ 0.93 | - | 0.00 | 1.57 |
| Index Sterling Corporate Bond Fund P-ACC-GBP | £ 0.84 | - | 0.00 | 1.95 |
| American Fund W-ACC-GBP | £ 52.31 | - | 0.00 | 0.00 |
| Cash Fund W-ACC-GBP | £ 1.03 | - | 0.00 | - |
| Emerg Europe, Middle East and Africa Fund W-ACC-GBP | £ 1.63 | - | 0.01 | 4.60 |
| Sustainable Global Equity Fund W-ACC-GBP | £ 32.90 | - | -0.11 | - |
| Global High Yield Fund W-ACC-GBP | £ 13.76 | - | 0.04 | 5.65 |
| Japan Fund W-ACC-GBP | £ 5.42 | - | -0.09 | 1.25 |
| Japan Smaller Companies Fund W-ACC-GBP | £ 3.48 | - | -0.04 | 0.60 |
| Select 50 Balanced Fund PI-ACC-GBP | £ 1.13 | - | 0.00 | - |
| Special Situations Fund W-ACC-GBP | £ 42.44 | - | 0.00 | - |
| Short Dated Corporate Bond Fund W-ACC-GBP | £ 10.45 | - | -0.01 | 4.06 |
| Sustainable Water & Waste W-ACC-GBP | £ 1.13 | - | 0.00 | 0.14 |
| Sustainable Water & Waste W-INC-GBP | £ 1.12 | - | 0.00 | 0.14 |
| UK Select Fund W-ACC-GBP | £ 3.69 | - | 0.00 | 2.00 |
| Global Enhanced Income W-ACC-GBP | £ 2.30 | - | 0.00 | - |
| Index UK Gilt Fund P-ACC-GBP | £ 0.77 | - | 0.00 | 0.58 |
| Sustainable Multi Asset Conservative Fund W-ACC-GBP | £ 0.90 | - | 0.00 | 1.70 |
| Sustainable Multi Asset Growth Fund W-ACC-GBP | £ 0.95 | - | 0.00 | - |

### Findlay Park Funds Plc (IRL)
30 Herbert Street, Dublin 2, Ireland Tel: 020 7968 4900
**FCA Recognised**

| Fund | Bid | Offer | D+/- | Yield |
|---|---|---|---|---|
| American EUR Unhedged Class | € 156.54 | - | -0.23 | 0.00 |
| American Fund USD Class | $ 163.95 | - | -0.45 | 0.00 |
| American Fund GBP Hedged | £ 80.53 | - | -0.22 | 0.00 |
| American Fund GBP Unhedged | £ 134.19 | - | 0.19 | 0.00 |

### Foord Asset Management
Website: www.foord.com - Email: info@foord.com
**FCA Recognised - Luxembourg UCITS**

| Fund | Bid | Offer | D+/- | Yield |
|---|---|---|---|---|
| Foord International Fund \| R | $ 49.67 | - | 0.15 | 0.00 |
| Foord Global Equity Fund (Lux) \| R | $ 16.23 | - | 0.09 | 0.00 |

**Regulated**

| Fund | Bid | Offer | D+/- | Yield |
|---|---|---|---|---|
| Foord Global Equity Fund (Sing) \| B | $ 19.32 | - | 0.11 | 0.00 |
| Foord International Trust (Gsy) | $ 48.41 | - | 0.15 | 0.00 |

### GAM
funds@gam.com, www.funds.gam.com
**Regulated**

| Fund | Bid | Offer | D+/- | Yield |
|---|---|---|---|---|
| LAPIS GBL TOP 50 DIV.YLD-Na-D | £ 126.76 | - | 0.27 | 2.55 |
| LAPIS GBL F OWD 50 DIV.YLD-Na-D | £ 100.22 | - | 0.14 | 1.09 |

### Guinness Global Investors

| Fund | Bid | Offer | D+/- | Yield |
|---|---|---|---|---|
| Guinness Global Equity Income Y GBP Dist | £ 19.02 | - | 0.09 | 2.22 |
| Guinness Global Innovators Y GBP Acc | £ 25.12 | - | -0.05 | 0.00 |
| Guinness Sustainable Global Equity Y GBP Acc | £ 11.27 | - | 0.03 | 0.00 |

### HPB Assurance Ltd
Anglo Intl House, Bank Hill, Douglas, Isle of Man, IM1 4LN 01638 563490
**International Insurances**

| Fund | Bid | Offer | D+/- | Yield |
|---|---|---|---|---|
| Holiday Property Bond Ser 1 | £ 0.48 | - | 0.00 | 0.00 |
| Holiday Property Bond Ser 2 | £ 0.63 | - | 0.00 | 0.00 |

### Janus Henderson Investors (UK)
PO Box 9023, Chelmsford, CM99 2WB Enquiries: 0800 832 832
www.janushenderson.com
**Authorised Inv Funds**

| Fund | Bid | Offer | D+/- | Yield |
|---|---|---|---|---|
| Janus Henderson Instl UK Idx Opps A Acc | £ 1.13 | - | 0.00 | 2.91 |

### M & G Securities (1200)F (UK)
PO Box 9038, Chelmsford, CM99 2XF
www.mandg.co.uk/charities Enq./Dealing: 0800 917 4472
**Authorised Inv Funds**

| Fund | Bid | Offer | D+/- | Yield |
|---|---|---|---|---|
| M&G Charibond Charities Fixed Interest Fund (Charibond) Inc | £ 1.11 | - | 0.00 | 1.99 |
| M&G Charibond Charities Fixed Interest Fund (Charibond) Acc | £ 39.43 | - | -0.08 | 1.61 |
| M&G Charity Multi Asset Fund Inc | £ 0.89 | - | 0.00 | - |
| M&G Charity Multi Asset Fund Acc | £ 106.62 | - | 0.17 | - |

### MMIP Investment Management Limited (GSY)
**Regulated**
**Multi-Manager Investment Programmes PCC Limited**

| Fund | Bid | Offer | D+/- | Yield |
|---|---|---|---|---|
| UK Equity Fd Cl A Series 01 | £ 2810.68 | 2842.19 | 142.84 | 0.00 |
| Diversified Absolute Rtn Fd USD Cl AF2 | $ 1588.98 | - | 5.05 | - |
| Diversified Absolute Return Stlg Cell AF2 | £ 1474.75 | - | 6.33 | - |
| Global Equity Fund A Lead Series | £ 1721.66 | 1727.57 | 67.75 | - |

### Marwyn Asset Management Limited (CYM)
**Regulated**

| Fund | Bid | Offer | D+/- | Yield |
|---|---|---|---|---|
| Marwyn Value Investors | £ 329.72 | - | -6.14 | 0.00 |

### Milltrust International Managed Investments ICAV (IRL)
mimi@milltrust.com, +44(0)20 8123 8316 www.milltrust.com
**Regulated**

| Fund | Bid | Offer | D+/- | Yield |
|---|---|---|---|---|
| British Innovation Fund | £ 121.92 | - | 2.89 | 0.00 |
| MAI - Buy & Lease (Australia) | A$ 103.45 | - | 0.50 | 0.00 |
| MAI - Buy & Lease (New Zealand) | NZ$ 91.20 | - | -6.06 | 0.00 |
| Milltrust Global Emerging Markets Fund - Class A | $ 93.96 | - | 0.56 | 0.00 |

### Milltrust International Managed Investments SPC
em@milltrust.com, +44(0)20 8123 8316, www.milltrust.com
**Regulated**

| Fund | Bid | Offer | D+/- | Yield |
|---|---|---|---|---|
| Milltrust Alaska Brazil SP A | $ 81.32 | - | 2.01 | 0.00 |
| Milltrust Laurium Africa SP A | $ 104.75 | - | 1.02 | 0.00 |
| Milltrust Marcellus India Fund | $ 130.79 | - | 1.31 | 0.00 |
| Milltrust Singular ASEAN SP Founders | $ 132.13 | - | -0.15 | 0.00 |
| Milltrust SPARX Korea Equity SP A | $ 103.75 | - | -1.07 | 0.00 |
| Milltrust Xingtai China SP A | $ 97.44 | - | -0.39 | 0.00 |
| The Climate Impact Asia Fund SP (Class A) | $ 78.48 | - | 2.41 | 0.00 |
| The Climate Impact Asia Fund (Class B) | $ 77.86 | - | 2.39 | 0.00 |

### Mirabaud Asset Management (LUX)
www.mirabaud.com, marketing@mirabaud-am.com
Conviction based investment vehicles details available here www.mirabaud-am.com
**Regulated**

| Fund | Bid | Offer | D+/- | Yield |
|---|---|---|---|---|
| Mir. - Glb Strat. Bd I USD | $ 115.77 | - | 0.22 | - |
| Mir. - DiscEur D Cap GBP | £ 164.06 | - | 0.98 | - |
| Mirabaud - UK Equity High Alpha | £ 139.83 | - | 0.26 | 0.00 |

### Oasis Crescent Global Investment Funds (UK) ICVC (UK)
**Regulated**

| Fund | Bid | Offer | D+/- | Yield |
|---|---|---|---|---|
| Oasis Crescent Global Equity Fund USD A (Dist) | $ 35.20 | - | 0.04 | 0.24 |
| Oasis Crescent Global Income Fund USD A (Dist) | $ 10.04 | - | 0.02 | 2.72 |
| Oasis Crescent Global Low Equity Fund USD D (Dist) | $ 12.36 | - | 0.02 | 0.59 |
| Oasis Crescent Global Medium Equity Fund USD A (Dist) | $ 13.71 | - | 0.01 | 0.14 |
| Oasis Crescent Global Property Equity Fund USD A (Dist) | $ 7.83 | - | 0.01 | 0.93 |
| Oasis Crescent Global Short Term Income Fund USD A (Dist) | $ 0.94 | - | 0.01 | 1.88 |
| Oasis Crescent Variable Fund GBP A (Dist) | £ 9.74 | - | 0.04 | 0.17 |

### Omnia Fund Ltd
**Other International Funds**

| Fund | Bid | Offer | D+/- | Yield |
|---|---|---|---|---|
| Estimated NAV | $ 946.10 | - | -9.48 | 0.00 |

### Orbis Investments (U.K.) Limited (GBR)
28 Dorset Square, London, NW1 6QG
www.orbis.com 0800 358 2030
**Regulated**

| Fund | Bid | Offer | D+/- | Yield |
|---|---|---|---|---|
| Orbis OEIC Global Cautious Standard | £ 11.81 | - | -0.01 | - |
| Orbis OEIC Global Balanced Standard | £ 19.17 | - | -0.03 | - |
| Orbis OEIC Global Equity Standard | £ 21.62 | - | -0.09 | 1.91 |
| Orbis OEIC UK Equity Standard | £ 11.31 | - | 0.01 | 3.21 |

### Platinum Capital Management Ltd
**Other International Funds**

| Fund | Bid | Offer | D+/- | Yield |
|---|---|---|---|---|
| Platinum All Star Fund - A | $ 141.55 | - | - | - |
| Platinum Global Growth UCITS Fund | $ 8.30 | - | 0.02 | 0.00 |
| Platinum Essential Resources UCITS Fund SICAV USD Class E | $ 11.83 | - | -0.10 | 0.00 |
| Platinum Global Dividend UCITS Fund | $ 48.68 | - | -0.17 | 0.00 |

### Polar Capital Funds Plc (IRL)
**Regulated**

| Fund | Bid | Offer | D+/- | Yield |
|---|---|---|---|---|
| Automation & Artificial Intelligence CL I USD Acc | $ 14.66 | 14.66 | -0.07 | 0.00 |
| Asian Starts I USD Acc $ | $ 14.52 | - | 0.09 | 0.00 |
| Biotechnology I USD | $ 39.50 | 39.50 | 0.57 | 0.00 |
| China Stars I USD Acc $ | $ 10.90 | 10.90 | 0.06 | 0.00 |
| Emerging Market Stars I USD Acc | $ 11.48 | - | 0.07 | 0.00 |
| European Ex UK Inc EUR Acc | € 14.17 | 14.17 | -0.03 | 0.00 |
| Financial Opps I USD | $ 13.96 | - | -0.06 | 2.56 |
| Global Convertible I USD | $ 13.81 | 13.81 | 0.05 | 0.00 |
| Global Insurance I GBP | £ 10.19 | - | 0.08 | 0.00 |
| Global Technology I USD | $ 63.81 | - | -0.34 | 0.00 |
| Healthcare Blue Chip Fund I USD Acc | $ 18.63 | 18.63 | 0.01 | 0.00 |
| Healthcare Dis I Acc USD $ | $ 12.40 | - | 0.12 | 0.00 |
| Healthcare Opps I USD | $ 66.45 | - | 0.02 | 0.00 |
| Income Opportunities B2 I GBP Acc | £ 2.92 | 2.92 | 0.01 | 0.00 |
| Japan Value I JPY | ¥ 139.02 | 139.02 | -0.70 | 0.00 |
| North American I USD | $ 33.40 | 33.40 | -0.05 | 0.00 |
| Smart Energy I USD Acc $ | $ 9.39 | 9.39 | 0.07 | 0.00 |
| Smart Mobility I USD Acc $ | $ 8.78 | 8.78 | 0.00 | 0.00 |
| UK Val Opp I GBP Acc | £ 12.05 | 12.05 | -0.04 | 0.00 |

### Private Fund Mgrs (Guernsey) Ltd (GSY)
**Regulated**

| Fund | Bid | Offer | D+/- | Yield |
|---|---|---|---|---|
| Monument Growth 29/11/2022 | £ 545.69 | 551.04 | 0.48 | 1.06 |

### Prusik Investment Management LLP (IRL)
Enquiries - 0207 493 1331
**Regulated**

| Fund | Bid | Offer | D+/- | Yield |
|---|---|---|---|---|
| Prusik Asian Equity Income B Dist | $ 177.87 | - | 1.88 | 4.58 |
| Prusik Asia Emerging Opportunities Fund A Acc | $ 186.92 | - | 0.60 | 0.00 |
| Prusik Asia Fund U Dist. | £ 213.27 | - | 1.06 | - |
| Prusik Asia Sustainable Growth Fund A Acc | $ 89.43 | - | 0.25 | - |

### Purisima Investment Fds (CI) Ltd (JER)
**Regulated**

| Fund | Bid | Offer | D+/- | Yield |
|---|---|---|---|---|
| PCG B ✠ | 283.73 | - | -1.95 | 0.00 |
| PCG C ✠ | 276.02 | - | -1.90 | 0.00 |

### Ram Active Investments SA
www.ram-ai.com
**Other International Funds**

| Fund | Bid | Offer | D+/- | Yield |
|---|---|---|---|---|
| RAM Systematic Emerg Markets Eq | $ 211.97 | 211.97 | -0.29 | - |
| RAM Systematic European Eq | € 519.24 | 519.24 | 0.43 | - |
| RAM Systematic Funds Global Sustainable Income Eq | $ 150.91 | 150.91 | -0.09 | 0.00 |
| RAM Systematic Global Eq Sustainable Alpha | $ 108.90 | 108.90 | -0.62 | - |
| RAM Systematic Long/Short European Eq | € 152.20 | 152.20 | -0.29 | - |
| RAM Systematic US Sustainable Eq | $ 350.32 | 350.32 | -1.40 | - |
| RAM Tactical Global Bond Total Return | € 139.13 | 139.13 | -0.01 | - |
| RAM Tactical II Asia Bond Total Return | $ 142.85 | 142.85 | 0.42 | - |

### Ruffer LLP (1000)F (UK)
65 Gresham Street, London, EC2V 7NQ
Order Desk and Enquiries: 0345 601 9610
**Authorised Inv Funds**
**Authorised Corporate Director - Link Fund Solutions**

| Fund | Bid | Offer | D+/- | Yield |
|---|---|---|---|---|
| LF Ruffer Diversified Rtrn C Acc | 106.72 | - | 0.01 | 0.85 |
| LF Ruffer Diversified Rtrn C Inc | 105.83 | - | 0.01 | 0.94 |
| LF Ruffer European C Acc | 763.47 | - | 0.34 | 0.82 |
| LF Ruffer European C Inc | 136.96 | - | 0.06 | - |
| LF Ruffer Equity & General C Acc | 563.76 | - | 1.24 | 0.77 |
| LF Ruffer Equity & General C Inc | 509.34 | - | 1.13 | 0.78 |
| LF Ruffer Gold C Acc | 220.15 | - | -2.27 | 0.00 |
| LF Ruffer Gold C Inc | 133.24 | - | -1.38 | - |
| LF Ruffer Japanese C Inc | 160.09 | - | 0.24 | 0.25 |
| LF Ruffer Japanese C Acc | 344.89 | - | 0.51 | 0.24 |
| LF Ruffer Total Return C Acc | 570.47 | - | -0.07 | 2.41 |
| LF Ruffer Total Return C Inc | 355.77 | - | -0.04 | 2.46 |

### Rubrics Global UCITS Funds Plc (IRL)
www.rubricsam.com
**Regulated**

| Fund | Bid | Offer | D+/- | Yield |
|---|---|---|---|---|
| Rubrics Emerging Markets Fixed Income UCITS Fund | $ 132.85 | - | 0.02 | 0.00 |
| Rubrics Global Credit UCITS Fund | $ 16.59 | - | 0.01 | - |
| Rubrics Global Fixed Income UCITS Fund | $ 170.05 | - | -0.02 | 0.00 |

### Slater Investments Ltd (UK)
www.slaterinvestments.com; Tel: 0207 220 9460
**FCA Recognised**

| Fund | Bid | Offer | D+/- | Yield |
|---|---|---|---|---|
| Slater Growth A Acc | 652.79 | 652.79 | 0.06 | 0.00 |
| Slater Income A Inc | 142.14 | 142.14 | 0.47 | 5.22 |
| Slater Recovery A Acc | 338.67 | 338.67 | 0.37 | 0.00 |
| Slater Artorius | 289.77 | 289.77 | 1.48 | 0.00 |

### Stonehage Fleming Investment Management Ltd (IRL)
www.stonehagefleming.com/gbi
enquiries@stonehagefleming.com
**Regulated**

| Fund | Bid | Offer | D+/- | Yield |
|---|---|---|---|---|
| SF Global Best Ideas Eq B USD ACC | $ 225.10 | - | -0.36 | - |
| SF Global Best Ideas Eq D GBP INC | £ 279.56 | - | 0.72 | - |

### Superfund Asset Management GmbH
www.superfund.com, +43 (1) 247 00
**Other International Funds**
**Other International Funds**

| Fund | Bid | Offer | D+/- | Yield |
|---|---|---|---|---|
| Superfund Green Gold | $ 1223.33 | - | -11.35 | 0.00 |
| Superfund Green Silver | $ 1105.11 | - | 12.61 | 0.00 |

**Regulated**

| Fund | Bid | Offer | D+/- | Yield |
|---|---|---|---|---|
| Superfund Green US$ | $ 963.35 | - | -5.96 | 0.00 |

### Toscafund Asset Management LLP (UK)
www.toscafund.com
**Authorised Funds**

| Fund | Bid | Offer | D+/- | Yield |
|---|---|---|---|---|
| Aptus Global Financials B Acc | £ 4.74 | - | 0.01 | 4.03 |
| Aptus Global Financials B Inc | £ 3.07 | - | 0.01 | 4.51 |

### Toscafund Asset Management LLP
www.toscafund.com

| Fund | Bid | Offer | D+/- | Yield |
|---|---|---|---|---|
| Tosca A USD | $ 406.01 | - | 8.84 | 0.00 |
| Tosca Mid Cap GBP | £ 170.45 | - | 1.07 | 0.00 |
| Tosca Opportunity B USD | $ 261.12 | - | 2.32 | 0.00 |
| Pegasus Fund Ltd A-1 GBP | £ 40.62 | - | 0.28 | 0.00 |

### Troy Asset Mgt (1200) (UK)
65 Gresham Street, London, EC2V 7NQ
Order Desk and Enquiries: 0345 608 0950
**Authorised Inv Funds**
**Authorised Corporate Director - Link Fund Solutions**
**Trojan Investment Funds**

| Fund | Bid | Offer | D+/- | Yield |
|---|---|---|---|---|
| Trojan Ethical O Acc | 126.00 | - | 0.09 | 0.00 |
| Trojan Ethical Global Inc O Acc | 101.92 | - | -0.21 | 2.54 |
| Trojan Ethical Global Inc O Inc | 99.39 | - | -0.20 | 2.56 |
| Trojan Ethical O Inc | 125.75 | - | 0.09 | 0.00 |

### Zadig Gestion (Memnon Fund) (LUX)
**FCA Recognised**

| Fund | Bid | Offer | D+/- | Yield |
|---|---|---|---|---|
| Memnon European Fund - Class U2 GBP | £ 239.37 | - | 1.28 | - |

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Different share classes are issued to reflect a different currency, charging structure or type of holder.

**Selling price:** Also called bid price. The price at which units in a unit trust are sold by investors.

**Buying price:** Also called offer price. The price at which units in a unit trust are bought by investors. Includes manager's initial charge.

**Single price:** Based on a mid-market valuation of the underlying investments. The buying and selling price for shares of an OEIC and units of a single priced unit trust are the same.

**Treatment of manager's periodic capital charge:** The letter C denotes that the trust deducts all or part of the manager's/operator's periodic charge from capital, contact the manager/operator for full details of the effect of this course of action.

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# Glimpses of a half-real city

*Edward Hopper's startlingly quiet New York lives again in an immaculate show at the Whitney. By Ariella Budick*

Vision of quietude and universality: 'Office in a Small City' (1953) by Edward Hopper — Heirs of Josephine N Hopper/licensed by Artists Rights Society

**The artist turned his gaze on himself in 'Self-portrait' (1925-30)** — Heirs of Josephine N Hopper/licensed by Artists Rights Society

As a life-long New Yorker, I take pride in knowing out-of-the-way corners and glittering avenues, as well as the art that takes my city as its subject. And yet I wasn't aware that Edward Hopper spent decades roaming the boroughs from his base in Greenwich Village. I had always assumed that the unpeopled, dawn-lit places he portrayed must belong to a struggling upstate or New England burgh. But as a startling and immaculate show at the Whitney Museum of American Art makes clear, some of Hopper's most gothic allegories of disconnection were set in the metropolis.

He took his sketchbooks on subways, plied the throngs and frequented the theatre. He could watch the crowds' tidal rhythms in Washington Square Park from his studio window. Yet he methodically stripped away the New Yorkiness from his New York to reveal a vision of quietude and universality.

Born in 1882 in Nyack, New York, a suburb across the Hudson and 25 miles north, Hopper commuted into Manhattan for art school and then bounced from studio to studio. In 1913, he settled in a cold-water flat with a communal bathroom at 3 Washington Square North, part of a row of 19th-century houses. He remained at the same address for the rest of his life, though in 1932 he and his wife Jo moved to a larger apartment across the hall.

He took his teacher Robert Henri's advice to immerse himself in his surroundings, but unlike his buddies in the Ashcan School, Hopper aimed to distil the eternal from the ephemeral, to turn the surface jamboree into formally complex, psychologically knotty vignettes.

All around him, the metropolis experienced spasms of manic change. Skyscrapers shot up, neighbourhoods vanished, the elevated train line (the El) disappeared and cars overwhelmed the streets. In the Village, a hive of sweatshops coexisted with studios and bohemian pubs; just two blocks from Hopper's home, two years before he moved there, 146 workers were killed in the Triangle Shirtwaist factory fire. The city that Hopper painted registers none of that grind or excitement or misery. It exudes an atmosphere of timeless antiquity, its streets and windows often populated by a single figure: his wife Jo.

The Whitney show, ingeniously curated by Kim Conaty, reveals how he treated New York as his muse and his efforts to disguise the passion. Sketches, studies and watercolours betray Hopper's keen observation of architectural detail that he then edited out. Recognisable places became ever more generic and surreal. The urban energy he must have absorbed in his ramblings slowed to a sullen stillness. Already as a young man, he painted the new Queensboro Bridge in impressionistic strokes and moody hues, making it glower. The great span's footings threaten to crush the old farmhouse that is in its shadow on Blackwell's (now Roosevelt) Island. Years later, in a different view, he relegated the bridge to a corner, a sign both of the island's isolation and its tenuous connection to the city. The bridge had gone from protagonist to rune.

Hopper's New York was partly real and partly invented, its wildness and variety filtered through his saturnine state of mind. Journeys on the El provided him with glimpses of domestic dramas playing out in living rooms, and he used that point of view to frame imaginary scenes. In "Room in New York" (1932), he levitates outside a window where a man in shirtsleeves and tie hunches over a newspaper, while a woman in a red dress touches a key on a piano. We hear that note in the evening shadows, not the clangour of the train.

The celebrated "Early Sunday Morning" (1930) looks like some small-town Main Street, a theatre set waiting for an actor's entrance. Instead, it's a block of Seventh Avenue, though which one is impossible to pin down. Hopper is less interested in location than in the mystery of doorways, fluttering curtains, and window shades lowered in a rhythm that nobody is around to hear. He has transcribed a specific somewhere and transformed it into anywhere.

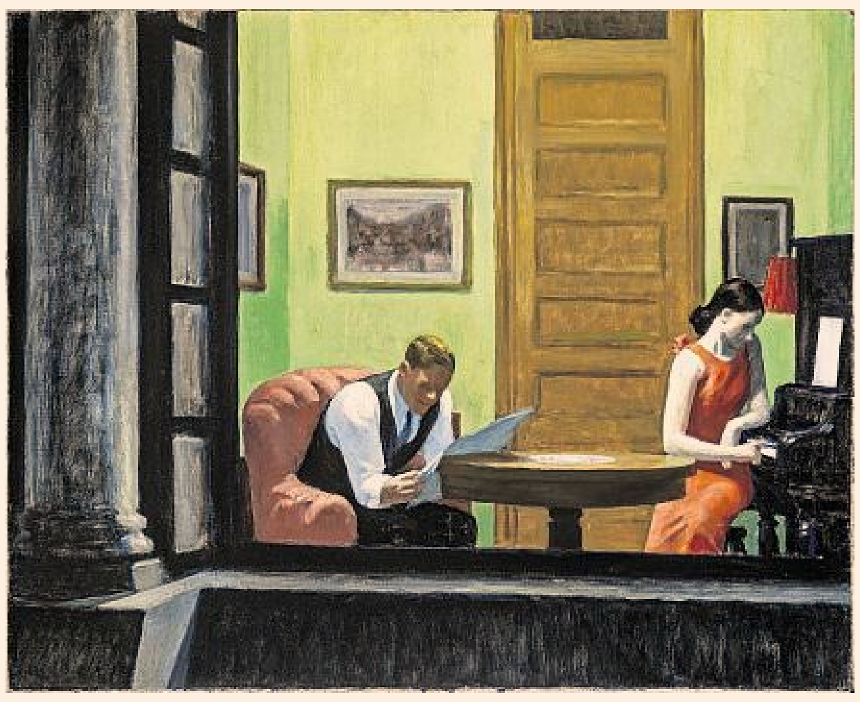
Hopper's form of realism was highly idiosyncratic. His aim, he wrote, was "to project upon canvas my most intimate reaction to the subject as it appears when I like it most; when the facts are given unity by my interest and prejudices". A painstaking process of subtraction and elision yielded that effect. Like him, I have regularly passed by the spot on upper Park Avenue where trains dip into a tunnel towards Grand Central Terminal. Though that block still looks much as it does in one of his sketches, I didn't recognise it from "Approaching a City" (1946), partly because he replaced a tenement with a large — and nonexistent — industrial edifice. Below, the black void of the tunnel sucks in all light and emits existential dread. The title ("a" not "the" city) punctuates Hopper's intention to generalise: dread is universal, Park Avenue at 97th Street is not.

Hopper painted New York with a chilly, backward-looking love that resisted change. A staunch conservative, he loathed FDR and disdained the blandishments of progress. "Through that hysterical period of American art when the first rush to be modern took place . . . Edward Hopper stalked, a quiet, slightly sneering, silently honest figure of obstinacy," Vanity Fair noted in 1929.

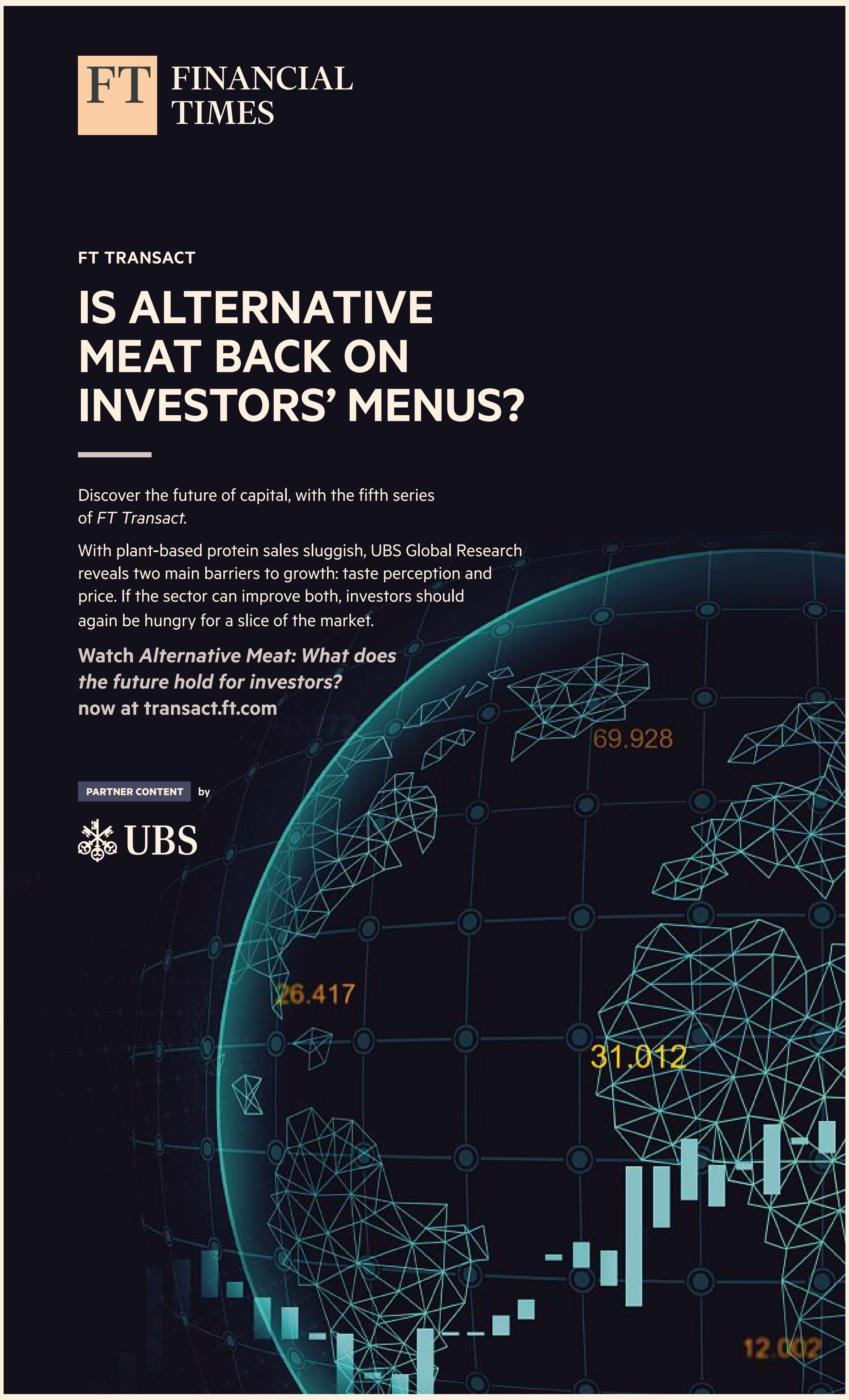
As skyscrapers stretched higher, Hopper kept his gaze low, lopping off towers and hewing to horizontal lines. In the same contrarian spirit, he fought the remaking of his own neighbourhood. A vitrine displays some of his correspondence with Mayor Fiorello La Guardia, building tsar Robert Moses and anyone else who might listen to his irascible views on the skyline. "I am opposed to any further desecration of Washington Square," he declared. "No more tall buildings should be built here."

His position mixed architectural preservation with self-preservation. New York University bought his building and in 1947 tried unsuccessfully to evict him and other artists who lived there. Hopper and his wife managed to hang on, but NYU eventually opened a trio of 30-storey towers by IM Pei a few blocks away. Today, 3 Washington Square North still stands, but his studio houses the offices of the university's School of Social Work. Long before his death in 1967, the city he fought and resisted and adored had drastically changed around him, resembling his enduring version of it a little less with each passing year.

*To March 5, whitney.org*



**Solitary note in the shadows: 'Room in New York' (1932) by Edward Hopper**
Heirs of Josephine N Hopper/licensed by Artists Rights Society




# Electronic duo flex their muscles

POP

**Bicep**
Alexandra Palace, London
★★★★☆

*Ludovic Hunter-Tilney*

Bicep's live show was a hit on the festival circuit this summer. But those were easily pleased audiences, the gigging equivalent of holiday-makers. The real test for the dance music duo would come when the nights drew in and their show retreated indoors. Euphoria is harder to attain when it requires a schlep to and from big venues in city suburbs, the gigging equivalent of commuting.

Which brings us to Alexandra Palace, the 10,000-capacity concert hall in the remote hilly fastness of north London. (Well, it's hard to get to by Tube.) Bicep's Andrew Ferguson and Matthew McBriar were playing two nights there, a sign of their accession to the top rank of electronic music's live acts.

Childhood friends from Northern Ireland, they grew up going to trance clubs in Belfast where the music was "like being smacked in the head by a hammer", in McBriar's approving recollection. Then they moved to London where they immersed themselves in the sounds of the city's communities, devising DJ sets that ran the gamut from Syrian singer Omar Souleyman to Detroit techno pioneer Derrick May.

Two successful albums ensued, first the eponymous calling card *Bicep* in 2017, then 2021's *Isles*, named as though they were voyaging into an archipelago of sounds.

They opened their Alexandra Palace set with two tracks from the latter, "X" and "Atlas". Ferguson and McBriar stood opposite each other on a platform, sideways to the audience, each intent on their own bank of consoles. They were obscured by dry ice and framed by high-tech, see-through screens that stretched to either wing of the stage.

**Bicep's Andrew Ferguson and Matthew McBriar perform at Alexandra Palace** — Dan Medhurst

A frisson ran through the thousands present when the first visuals appeared, a set of brightly coloured geometric patterns. But the music was less striking. The cascading arpeggios, plaintive vocal backing tracks and supple beats that filled the room sounded like a louder version of the album, as though played on a monstrously large home stereo system.

This underwhelming effect turned out to be deliberate. Bicep wanted to make us feel at home before flipping the musical switch. The moment of sonic disruption was announced by the arrival of the powerful electronic bassline that muscled its way into the soothing, liquidy repetitions of "Waterfall".

A decisive shift in tempo was under way. It continued with passages of four-to-the-floor beats and the peaks and drops of so-called "big room" dance music, marshalled with subtlety rather than a brash desire to overwhelm.

Unlike the superstar DJs who stand before their audiences like gurning high priests, Ferguson and McBriar were anonymous at their stations. The experience was intended to be immersive, not exhibitionist. Melodies and vocals from album tracks glimmered within the hard-edged rhythmic action, like a remix conducted in real time. The light show and visuals were arresting. Mood changes — excitement, tension, release — were well orchestrated. Bicep's move indoors for winter has worked.

*bicepmusic.com*

FT BIG READ. FT PERSON OF THE YEAR

# A wartime leader for the social media era

**Ukraine's Volodymyr Zelenskyy has embodied the resilience of his people. He has ensured western unity and has become a standard bearer for liberal democracy in the contest with authoritarianism.**

*By Christopher Miller, Ben Hall and Roula Khalaf*

Volodymyr Zelenskyy makes a surprise visit to Kherson after the Russian retreat from the city last month. Local residents celebrate, right
Paula Bronstein/Getty Images; Reuters

Nine months into a brutal struggle for national survival against Russian invaders, Volodymyr Zelenskyy looks tired, with dark circles under his eyes. What he would like to be doing instead of confronting a merciless invader is fishing with his son. "I just want to catch a carp in the Dnipro river," he says.

For a taste of normal life, the unlikely president may still have a long wait, despite the surprising streak of battlefield successes for Ukraine's forces. But the folksy message is characteristic of a leader who still depicts himself as an everyman with humble tastes and a deep sense of humanity, qualities that have earned him the admiration of Ukrainians and supporters abroad.

It is the mirror image of the fictional ordinary-guy-turned-president that he played in a satirical hit television series that skyrocketed him to fame. It is also the antithesis of Russian president Vladimir Putin, hidden away in the Kremlin, whose obsession with rebuilding an empire has cost tens, possibly hundreds, of thousands of lives.

Written off by many Ukrainians before the February invasion as something of a joke, an amateur struggling to rise to the challenge of high office, the 44-year-old Zelenskyy has earned a place in history for his extraordinary display of leadership and fortitude.

Ukraine surprised the world by fending off the Russian assault on Kyiv and with its counteroffensives in Kharkiv and Kherson provinces. It has retaken half of the territory Moscow's troops had seized this year. Zelenskyy's forces are pressing ahead in the south and east even as winter sets in, with the goal of liberating all Ukrainian territory.

Just as Winston Churchill went on the radio to rally his country during the Blitz, Zelenskyy has used social media to campaign relentlessly for western military and financial support, turning the plight of his people into moral leverage over leaders in Europe and the US. He has persuaded Europeans to bear the huge costs of standing up to Putin and to offer Kyiv a path to EU membership.

Along the way, he has become a standard bearer for liberal democracy in the wider global contest with authoritarianism that could define the course of the 21st century.

Zelenskyy has also come to embody the courage and resilience of the Ukrainian people in their fight against Russian aggression. It is for these reasons that the Financial Times has chosen Zelenskyy as the person of the year.

In an interview with the FT, Zelenskyy recalls the early days of the invasion and says he is not really courageous: "I am more responsible than I am brave . . . I just hate to let people down."

Zelenskyy's powerful chief of staff, Andriy Yermak, recalls how three years ago he told a group of western journalists that "our president would be the most famous and strongest leader of his time". He adds: "I won't say I told you so, but I was right."

### A close call

Zelenskyy's decision to remain in Kyiv at the start of the invasion rather than accept a US offer of evacuation was one of the most consequential moments in the war, galvanising Ukraine's military and its people to resist. It was a surprise to Ukrainians and western allies, who had low expectations of the country's political leaders.

For days before the invasion, Zelenskyy seemed in denial about the prospect of an all-out Russian assault. "I'm the president of Ukraine and I'm based here and I think I know the details better here," he told reporters after speaking to US President Joe Biden.

When the invasion started 10 days later, it was unclear whether Zelenskyy would survive the day. He was asleep beside his wife, Olena Zelenska, at the presidential palace in Kyiv as the first missiles struck and Russian tanks streamed across the border. Russia, the president would later say, had marked him "target number one" and his family "target number two".

While Olena and their children were evacuated to an undisclosed location, the president was moved with staff and bodyguards into an underground bunker in the palace. Soon after, Russian special forces were parachuted in. Local collaborators who had infiltrated the ranks of the Ukrainian security service and quietly moved into safe houses close to the government quarter attempted to storm his office. They were unsuccessful, but it was a close call.

EU leaders were horrified when Zelenskyy told them by video link that it might be the last time they saw him alive. But later that night Zelenskyy, standing out in the open near the presidential office and flanked by his closest advisers, sent a message by video selfie that millions of Ukrainians had wanted to hear: "The president is here. We are all here. Our soldiers are here."

**Zelenskyy on . . .**
**Courage**
'I am more responsible than I am brave . . . I just hate to let people down'

**Negotiating with Russia**
'The world is not a doctor . . . it is not Putin's doctor, and Putin is not a patient of this world'

**On Zelenskyy**
'He is a person of chaos. In war, it is chaos. He feels at home'
Iuliia Mendel, former press secretary

'He said, "Look, history has chosen us. Fate has chosen us. And now we have to live up to that"'
Ruslan Stefanchuk, speaker of the Ukrainian parliament, on Zelenskyy at the start of the war

Nine months later, Russian forces are long gone from Kyiv — although they continue to menace the capital with weekly missile strikes against the power network, plunging millions into darkness. At the presidential palace, no one is taking chances: sandbagged shooting positions are placed along the corridors as if Russian special forces could again storm the building.

Zelenskyy was born into a Ukrainian-Jewish family in Kryvyi Rih, a steelmaking city in south-central Ukraine. In the post-Soviet 1990s, it was a rough-and-tumble type of place where a youngster like Zelenskyy had to make his own luck, but his upbringing was relatively comfortable. His mother is an engineer and his father a computer science professor. He was the teachers' pet in school, he said, because he was very dependable and funny. "Everybody loved me. I was the energy of every group," he says.

Zelenskyy met Olena in school and they grew close at university, where he studied law and she studied architecture. They went on to form a wildly successful comedy troupe and production company. Named after the district where they grew up, Kvartal 95, it toured Ukraine and Russia before producing a hit TV series that launched Zelenskyy's career in politics.

He announced his presidential run on New Year's Eve in 2018, with an anti-establishment and anti-corruption platform strikingly similar to that of the character he played on TV. Less than four months later, he defeated incumbent Petro Poroshenko by a landslide, winning 73 per cent of the vote.

The political novice inherited a country that had been at war with Russia since it first invaded in 2014 and he vowed to bring peace. Ukrainians, tired of Poroshenko's militant attitude, saw Zelenskyy, a native Russian speaker supposedly viewed more positively in Moscow, as someone who might be able to hammer out a deal to end the bloodshed. Putin, it turned out, was not open to compromise.

On other fronts, Zelenskyy's record during the first two and half years of his presidency was mixed at best. He passed important reforms, including on land sales, but made little headway in tackling corruption or reducing the influence of Ukraine's oligarchs.

He governed via a small clique of trusted but often ill-qualified lieutenants, many of them longtime friends or associates from his showbusiness career. Some accused Zelenskyy of an authoritarian streak. He fired officials for failing to produce instant results. An anti-oligarch law passed in 2021, although perhaps well intentioned, in effect gave the president arbitrary powers for pursuing personal or political vendettas. His attempt to have his predecessor Poroshenko, a confectionery magnate, prosecuted for treason was denounced by western capitals.

### 'Fate has chosen us'

Even some of Zelenskyy's staff admit he can be thin-skinned. He himself says one thing he has learnt since February is "don't be offended by the small things". Diplomats who have followed his presidency say he distrusts western motives and still fears betrayal.

Zelenskyy with Kvartel 95 in 2019

Doubts about Zelenskyy's suitability to lead his nation in war dissipated with Russia's attack. The president appeared to step into a new role — along with new khaki garb.

Iuliia Mendel, who served as Zelenskyy's press secretary, says he lacked the experience and discipline to be a great peacetime leader but was better suited to lead during the tumult of war. "He is a person of chaos," she says. "In war, it is chaos. He feels at home."

Ruslan Stefanchuk, speaker of the Ukrainian parliament and a close political ally, noted the change at the first meeting of the National Security and Defence Council on February 24. "He was in a very, very, I would say, combative mood. And he said, 'Look, history has chosen us. Fate has chosen us. And now we have to live up to that.'"

It was not just the military that needed to mobilise but the entire state. Zelenskyy streamlined decision-making between his office, government and parliament. He also learnt to make decisions swiftly.

But it is Zelenskyy's never-ending communications that have been most remarkable. His nightly video messages and Telegram posts have been a tonic for a weary population. A message directed at Moscow in September — "Without light or without you? Without you" — turned into a social media rallying cry for many Ukrainians.

Zelenskyy has addressed countless parliaments, conferences and events — from the Grammy Awards to the Glastonbury Festival. Each time he has tailored the message to the audience, often appealing to the hearts and minds of the people over their governments. He has used his pulpit to press — and sometimes shame — governments into providing vast quantities of weapons.

In a speech to the Bundestag in March, he skewered German leaders for putting their economic interests before security, saying they were adding stones to the new Berlin Wall that Russia was building across Europe. Western officials on occasion found that agreements discussed in private were immediately relayed on social media by the president or his staff, giving partners no room to back out.

His communication has rarely gone awry, although it has grated with some allies. One exception to Zelenskyy's sure-footed messaging was his insistence that a missile strike that killed two people in Poland on November 15 was Russia's doing. Although Polish and US officials said it was likely to have been a stray Ukrainian anti-aircraft rocket, Zelenskyy called it a "very significant escalation" that required an allied response — putting him at odds with Washington, Warsaw and other European capitals anxious not to get sucked into the war.

Ukraine's torment is far from over. Evicting Russian troops from the Kherson and Zaporizhzhia regions in the south will be difficult enough, let alone from the well-defended positions in Donetsk, Luhansk and Crimea, areas occupied for eight years.

Nonetheless, Ukrainians are already debating whether their leader, like his illustrious British predecessor, may be the right man for a war of national survival but the wrong one for the peace that follows.

Victory will not only belong to Ukraine's president. Some Ukrainians are making a name for themselves in the war and have political ambitions. The astonishing mobilisation of Ukrainian civil society since February can be expected to make the country more demanding of its leaders.

When the fighting eventually comes to an end, Zelenskyy will face tough questions about the failure to sufficiently prepare Ukraine for a full-blown invasion. The security services did not lay mines or blow up bridges along Russia's lines of attack from the north and south, leading large swaths of territory to be captured quickly and easily.

Zelenskyy says that despite the public warnings by western officials, Kyiv was never given intelligence it could act on about the impending Russian attack.

"Nobody showed us specific material saying it would come from this or that direction," he says.

Zelenskyy repeatedly attempted to call Putin in the run-up to the invasion. He wanted to tell him it would be a "great mistake, a great tragedy" but the Russian leader would not take his calls. "We are fighting against insane people," says Zelenskyy of the Russian leadership. He is adamant that Ukraine must liberate all of its territories from Russian occupation, otherwise the war will simply resume at a later date.

But the success of Ukraine's counteroffensives will hinge on the amount of advanced weaponry its supporters and, above all, the US are willing to supply.

The interests of Kyiv and the west could diverge. Death, destruction and anger over Russian war crimes have hardened Ukrainian public opinion against compromises with Moscow. Some allies fear a Ukrainian attempt to retake Crimea could lead to a dangerous escalation by Putin, possibly with nuclear weapons.

Already there are faint calls for negotiating with Russia, appeals that Zelenskyy rejects. "The world is not a doctor with extensive experience, it is not Putin's doctor, and Putin is not a patient of this world."

Despite the "absolute evil" of Russia's war, the former comic actor still finds moments for humour, just as millions of Ukrainians find succour by sharing jokes about their Russian attackers on social media. "If you don't sometimes smile because of these people you enter a depression, and you can't make decisions when in a depression," he says.

Last week, Russian missile strikes left millions of Ukrainians and swaths of the country, including the capital, without running water for more than 24 hours after power was cut. The president's office was no exception. Zelenskyy recalls with a chuckle how a visitor to his office had asked to borrow his toilet. "I refused. I said: 'I know what it will be like in several hours.' It was very funny."

# The FT View

FINANCIAL TIMES
'Without fear and without favour'

ft.com/opinion

## West's messy Russian oil price cap begins to bite

*Policy is two steps forward and one step back, but in the right direction*

It is one of the most forceful interventions in the global oil market ever. From Monday of this week, the EU has banned seaborne oil imports from Russia. It also joins the US, the UK, and the broader west in prohibiting their businesses from transporting Russian oil anywhere in the world, or providing services such as insurance, unless Moscow sells its oil below a price cap of their choosing.

Together, the embargo, the services prohibitions and the price cap amount to an unprecedented political rejigging of global oil flows. Yet the impact of the sanctions will depend on the next moves by Russia, the west, and those emerging countries trying to stay neutral over Vladimir Putin's invasion of Ukraine.

In the short run, little may change. Since the $60 per barrel price cap is close to where Russian oil was already trading (financial restrictions and corporate self-sanctioning have created a steep discount to world prices), much can go on as before. In particular, the price cap is unlikely to reach its ostensible goal of curtailing Russian revenues enough to hamstring Putin's ability to wage war.

Russia says it will refuse to sell to countries complying with the price cap. If significant amounts of crude are taken off the market, prices could skyrocket. In that case, however, the Opec club of large oil exporters will judge whether a new oil spike is in their interest. The cartel decided against changing production on the weekend, suggesting it prefers to keep things stable.

And the Russian threat may be bluster, depending on what counts as "complying". Much of its export has shifted to emerging market buyers such as China and India. There is no prospect of these formally adopting the EU-G7 policy — but they are not above using it to negotiate a tougher bargain with Moscow. This is precisely the west's hope. Diplomatic pressure for "soft" alignment, on the basis that it is good for importing countries to get cheaper oil, is likely to meet with more co-operation than the more aggressive tool of secondary sanctions.

Ukraine's western friends have more work to do. They must put in the diplomatic effort to secure broad if informal respect for the price cap. Russia would flaunt the propaganda victory of striking deals even marginally above it. They must also put up sufficient resources to monitor and enforce the policy. Western shipping and service providers will face attempts to circumvent the cap, for example through falsified documents.

The messy practical realities reflect the messiness of the political dilemma western governments face in attempting to diminish Russia's revenues while limiting the cost to themselves. The cap originated in US worries that the oil sanctions the EU first enacted — with no exemption for oil sold below a cap — went too far. The price spike that locking too much Russian oil out of global markets could have caused was the last thing President Joe Biden's administration wanted ahead of midterm elections.

> Ukraine's western friends must put in the diplomatic effort to secure broad if informal respect for the intervention

The result is the somewhat self-contradictory desire for the oil to keep flowing but for revenue not to flow back into Russia's coffers. The original EU sanctions did more to hurt Russia, but would also have imposed greater costs on the west's own economies. US self-protectiveness prevailed. As with military support and financial sanctions, the west again falls somewhat short of its vow to do all in its power to help Ukraine. In its planned regular reviews, the coalition should aim to ratchet the price cap downward, if needed.

Yet this latest act of western unity in Ukraine's cause, still at significant cost to itself, is no small achievement. The oil sanctions may rightly be seen as two steps forward and one step back — but in the right direction, a direction in which the west must continue to stride.

Opinion Euthanasia

## The right to die shouldn't depend on your income

Ewan White

Stephen Bush

Does having money mean we make better decisions? Or does making better decisions mean that we make more money? In part, it depends on how you define "better": when I had very little money, I ate largely meat-free meals and I drank hardly any alcohol. From a physician's perspective, these are much better decisions than the ones I make now. But I think it's fair to say that the decisions I make now are more authentic. Being comfortably off allows you to make the choices you *really* want to make rather than those you have to make as a result of a lack of funds or other constraints.

The question of whether or not the rich make better decisions is vital in the debate happening across much of the democratic world over assisted dying.

> Limited evidence suggests these decisions are at least partially shaped by earnings

In Canada, where a fierce debate is raging over the looming expansion of the country's medical assistance in dying laws (Maid) beyond end-of-life cases, critics fear that it will drive up the number of people seeking Maid because of the costs of not doing so. Krista Carr, the vice-president of disabilities charity Inclusion Canada, has argued that Maid expansion is a poor alternative to more funding for social housing and mobility assistance, saying that people with disabilities "don't actually want to die, they want to live. But they want to live a life on par with other people, which is entirely possible with proper support."

The argument over Canada's Maid expansion is part of a broader one about whether legislating for the right to die inevitably leads to less funding for more expensive health interventions, and increases the number of people seeking assisted dying — not in order to have a "good death", but because they cannot afford to have a good life. Does the right to die end up an obligation for people on lower incomes?

What both supporters and opponents of euthanasia laws struggle with is the absence of meaningful points of comparison. Only a handful of national or state legislatures have passed assisted dying laws: a much smaller number have had them for a prolonged period of time. In addition, they are a politically and socially heterodox set of jurisdictions, ranging from Oregon, a politically liberal US state, through to Holland, a centrist EU member state, to Switzerland, where the centre-right usually dominates.

In addition, very few studies, even within countries, have been reliably replicated. Because the number of deaths by physician-assisted suicide is a comparatively small part of mortality even in countries with right-to-die laws, studies tend to face a great deal of inexplicable variation. We can't, with any confidence, say that the limited lessons we can glean would even apply within the country in question, let alone offer broader insights about the impact of assisted dying laws in countries that don't yet have them.

Nonetheless, it is better to start with some data than none at all. In Canada, where assisted dying has been legal since 2016, the evidence suggests that poorer patients have been more likely to request medical assistance in dying than wealthier ones but are no more likely to receive it. In the Netherlands, which has one of the broadest assisted dying laws, regions with higher levels of income are more likely to have higher rates of euthanasia. In Oregon, the "vulnerable", be they the poor, those without health insurance or people with disabilities, are no more likely to exercise the right to die than anyone else, though Oregon, and the other US states that have followed its lead, has implemented more limited right-to-die legislation than in Canada or the Netherlands.

Of course, the mere presence of an income differential doesn't necessarily prove we are seeing people making constrained choices as a result of their lack of income. If you have experienced a prolonged period of ill health before a terminal diagnosis, or you have had long-run mental health difficulties, that will, inevitably, have consequences for how much you can earn.

But the limited evidence does suggest that decisions about end-of-life choices are at least partially shaped by income. One way to avoid that is for right-to-die laws to be strictly limited to terminal illness and genuine "end-of-life" situations, rather than broader "right to die" laws covering people across their lifetimes.

States with limited assisted dying laws can have some confidence that measures thus confined carry a smaller risk of people making choices due to a calculation about what they can afford rather than what they genuinely want. That's the closest to a clear lesson for policymakers who want to make sure that the right to die means genuine freedom to choose.

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# Letters

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## EU can bolster its security with common arms procurement

Your article "War exposes 'hard reality' of west's capacity" (Report, December 3) clearly sets out the problems of lack of military supplies and some of the causes.

There is another reason: Europe has too many weapon systems.

The US armed forces and the sum of European Nato forces have similar numbers of personnel. But the US has about 30 main weapon systems and European Nato members 175.

That multiplicity means higher production costs and so less kit that is modernised, less often. Incompatible equipment, each with its own logistics trail, makes it harder for armies to support each other on the battlefield.

A comparison with the quality of American kit seems to show that the benefits of competition do not outweigh the lack of economies of scale.

Since the main driver of multiple weapons systems appears to be a desire to protect national defence industries and national sovereignty, competition is anyway not given free rein.

A solution would be to go beyond the existing Permanent Structured Co-Operation (PESCO) mechanisms such that all the major defence procurement of EU countries would be run by the European Commission.

Vaccine procurement showed how much better that worked than each member state going it alone. Non-EU Nato members could be associated with the programme.

The EU could also set up a mechanism so that defence capabilities that are beyond the ability or need of an individual country could be financed collectively even if hosted within one or several countries' armed forces.

Finland's prime minister Sanna Marin said that the Ukraine war had exposed how Europe was not strong enough ("Finland warns democracies against being 'naive' on China", Report, December 3).

Common EU defence procurement would help address that failure.

**Michael Romberg**
*London W1, UK*

### Palestine double standards mock Nato Ukraine stance

Kristina Berdynskykh's return to Kherson ("A bittersweet homecoming", Life & Arts, FT Weekend, November 26) was a moving account of the effects of occupation on Kherson's citizens and their happiness at Russia's withdrawal.

But I have just returned from 11 days visiting the Palestinian occupied territories and each time I go the situation is worse. I witnessed continuing cruelty and grave breaches of international law. More and more land is illegally occupied and the Israeli army deployed to protect illegal settlers and oppress and kill Palestinian citizens. Now politicians who openly call for ethnic cleansing will take up senior positions in the new Israeli government.

Clearly Vladimir Putin's invasion and occupation of Ukrainian territory is wrong, violent and cruel. But so is Israel's occupation of Palestinian territory. We claim we are upholding an international rules-based order in Ukraine. Yet we ignore international law and the opinion of the International Court of Justice in relation to Israel.

If we upheld international law, the Palestinians would have their state and Israel would be saved from its monstrous record of cruelty and illegality.

It is little wonder that so much of the world does not support Nato on the Ukraine war.

They see clearly our hypocrisy and double standards.

**Clare Short**
*Former International Development Secretary (1997-2003), London SW4, UK*

### How Labour's schools plan makes Mao look moderate

Stephen Bush points out that private schools are now "the first choice of the global elite" (Opinion, December 3).

The proposal made by the UK Labour party to remove the VAT exemption on private school fees would do nothing to change this.

In his 1926 "Analysis of the Classes in Chinese Society", Mao Zedong described the global elite as a "comprador" class. This "appendage of the international bourgeoisie" was viewed as quite distinct from the petty bourgeoise of "small traders" and "small lawyers" who, in Mao's view, had very different interests.

In today's Britain, the country's lower middle class is being squeezed out of public schools by the super-rich.

Labour has yet to formulate a clear position on the role of the global elite in British society. Can the lower middle class retain its foothold in the public schools, or should they be allowed to become exclusive fiefdoms of the planet's plutocrats?

**Ivor Morgan**
*Lincoln, UK*

### Time for Britain to think the unthinkable and rejoin

Sebastian Payne (Opinion, December 2) deserves praise for his trenchant recommendations on what key steps Rishi Sunak, Britain's new prime minister, must take to rescue his country's shattered economy. My greatest fear, however, is that in the end they will come up short. Anyone who seriously cares about the future health of Britain's "palpable economy" (all those tangible goods, services and comforts) will be required to do what has until now been close-to unthinkable: to consider reapplying for membership in the oft-spurned European Union, in whole or in part.

**John Starrels**
*Former Senior Staff, IMF*
*Chevy Chase, MD, US*

### Still debating those words on side of a London bus

While John M Jones ("Words more telling than those on the Brexit bus", Letters, November 30) sees 4,000 pieces of EU-derived legislation which the government is proposing to scrap as a compelling argument for leaving the EU, I see them as a more compelling argument for rejoining.

**Joel Griffiths**
*Keighley, West Yorkshire, UK*

### Temasek could have saved itself a load of grief on FTX

I was amused to read ("Singapore's Temasek launches a review into ill-fated $275mn FTX investment" Report, December 1) that Temasek spent eight months doing due diligence before their failed punt on crypto exchange FTX. If they had given me a call I would only need 10 minutes to explain why they shouldn't waste other people's money buying snake oil — and I am not even an expert in economic or financial matters.

**Gonçalo Cabral**
*Macau*

### Is technology the elephant in the room of UK growth?

I very much agree with Martin Wolf in his first-class article ("How to think about policy in a polycrisis", Opinion, November 30) that "economists have to recognise how the economy is interconnected with other forces" like politics, finance and social change, that are treated as separate "intellectual silos". However, there is one important force that should also warrant consideration: technology.

Business school students are taught about Pest — Political, Economic, Social and Technological forces. In their authoritative book *Macroeconomics: Understanding the Wealth of Nations* David Miles and Andrew Scott indicate that "technological progress has been a major force behind economic growth for some time" because "it causes all (economic) output to rise even if the capital stock or (labour) hours worked do not increase".

Wolf also says that geographically "the overwhelming bulk (of global economic growth) will be generated by Asian economies". One such growth exemplar is Taiwan which now accounts for 20 per cent of global (semiconductor) wafer fabrication . . . and 92 per cent of the most advanced chips (Big Read, October 25). In South Korea, another economy where technology is taken seriously, it comes as no surprise that the cabinet post of science minister is held by Professor Lee Jong-ho, a highly regarded semiconductor expert, who also holds a university chair in electrical and computer science.

In Britain, there is much talk today about "economic growth" and government policy to achieve it.

However, I see precious little discussion about technology in general, far less about computer science in particular, and how it may induce growth and improve productivity. Maybe technology is the elephant in the room for British economic growth.

**Neil McPhater**
*Longstanton, Cambridgeshire, UK*

### An excoriating article about crony capitalism

How nice to read Martin Wolf's typically low-key excoriation of modern banking ("Competitiveness' mantra must not let risky banking rise again," Opinion, December 3), then to turn the page to learn that UniCredit's chief executive's main motivation is greed: he wants as much money as Jamie Dimon, who earned $34.5mn last year (Report, December 3).

Apparently Andrea Orcel is "a star investment banker", which means that he is, or was, very good at something that Wolf correctly describes as "of no evident value to the public". This is crony capitalism at its worse.

**Andrew Anderson**
*Edinburgh, UK*

### Consider for a moment how 60-year-olds feel

In all the analysis as to why hordes of 50 to 64-year-olds are leaving the workforce ("The Great Unretirement era is coming for Britain", Opinion, November 26), no one is talking about how the 50+ generation feels they are treated at work.

In recent online discussions, one said "I felt undervalued . . . we have had enough of being treated as if we have irrelevant skills and knowledge". Another said: "As a retired 60+ I'd be more than happy to return to the workplace, provided there was flexibility in hours worked."

HR teams of global corporates recognise training, benefits and flexible hours have focused too much on the younger generations. One admitted, "All we have for the older generation is impotency and menopause support."

Camilla Cavendish is right — this generation wants purpose. And in a year or two, some may return to work, probably part-time.

But if we want to stop the rate of outward flow and attract others back, then we need to rethink "work" for this generation, which largely suffers in silence. They want to be valued and respected; have ageism addressed; flexible working hours; and investment in their skills. The benefit that employers could offer is to help them plan the next stage of their lives and go part-time while they test out new ideas.

Our evidence is that this generation is desperately keen to use their skills. They are not work-shy as some commentators suggest. But they struggle with how they do this. Of all the post-pandemic problems facing this country, surely this is one of the easiest for employers to solve?

**Victoria Tomlinson**
*Chief Executive, Next-Up*
*Harrogate, North Yorkshire, UK*

### Why game theory won't work for the World Cup

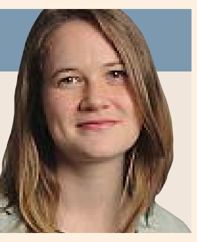
George Horsington ("Try this for a bit of beautiful game theory", Letters, November 25) suggests that applying game theory to a World Cup final between liberal democracies could provide an opportunity to protest against the armband restrictions imposed by Fifa. While this is a good idea in principle, it is unsound in practice. Game theory teaches that in a finitely repeated situation — a framework that applies in the case of this tournament — any agreement between two players to collude in some way is likely to break down in the last round. At that crucial stage in the competition it would always be in the interest of both sides to renege on any earlier undertaking: the side that does so places the other at a disadvantage and consequently both will do so.

**Professor R Rothschild**
*Lancaster, Lancashire, UK*

# Opinion

## Do you really want to live to be 100?

SOCIETY
Sarah O'Connor



I am one of life's optimists. When I think about living to be 100 years old, I picture a birthday party where I am surrounded by my devoted descendants, perhaps followed by a commercial space flight as a celebratory treat.

But I'm in the minority here. A lot of people would rather be dead. In a recent UK poll by Ipsos, only 35 per cent of people said they wanted to become centenarians.

Men were keener on the idea than women (43 per cent to 28 per cent) — a shame really, since women are more likely than men to achieve it. Age is a factor too: older people are less likely to want to live to 100 than younger ones, perhaps because they have already had a taste of poor health, or have gone through the experience of caring for elderly parents who suffered in their later years. In the poll, fewer than one in five people thought they would have a good quality of life if they reached 100.

We all know that life expectancy has risen globally over the last century thanks to advances in healthcare and medicine as well as improvements in education and living standards. In the UK in 2020, the number of centenarians reached more than 15,000, up almost a fifth on the year before. But — as is clear by how many don't want to live to be 100 — "healthy life expectancy" is probably a better measure of what people actually *want*.

Healthy life expectancy — a measure of the number of years someone is expected to live in good health — is not a perfect metric, since it's based on health and mortality rates now rather than projections of how they might change. But it's still useful. What can it tell us?

First, while it has been rising globally, it has not kept pace with improvements in overall life expectancy, according to a study of 195 countries between 1995 to 2017.

Second, women might outlive men, but the number of years they can expect to live in good health is very similar. In the EU, for example, life expectancy for women in 2020 was 5.7 years longer on average than for men, but the healthy life expectancy gap was only one year.

> Older people are less likely to want to be centenarians, perhaps because they have had a taste of ill health

Third, as with overall longevity, the correlation between healthy life expectancy and gross domestic product per head becomes pretty loose once countries have passed a certain level of development. Greece and Germany have very similar healthy life expectancy numbers, for example, even though Germany is significantly richer.

There are some stark differences between neighbours, too. In 2020, a man born in Finland or Denmark could expect to live between 73 and 74 per cent of their lives free from health limitations, a raw deal compared with the 90 per cent on offer in Sweden. Cultural factors play a role, from the Mediterranean diet in Greece to alcohol use in Finland.

In the UK, which ranked in the middle of the EU countries before Brexit, things aren't looking good. In the years before the pandemic, healthy life expectancy had stagnated for men at 62.9 years and had begun to fall slightly for women to 63.3 years.

The differences between rich and poor are also vast. In England, women living in the most deprived areas have a healthy life expectancy at birth of 51.4 years compared with 71.2 years for women living in the least deprived areas.

David Finch, an assistant director at the Health Foundation, says UK policymakers should be "very worried" about the trend, given the country was hardly top of the league table to begin with. "When you can see that clear space for improvement and we stop improving, it's particularly concerning."

There are plenty of possible reasons why health has worsened, from rising obesity and alcohol misuse to the impact of government spending cuts after 2010 and the broader impact of a decade without any real wage growth.

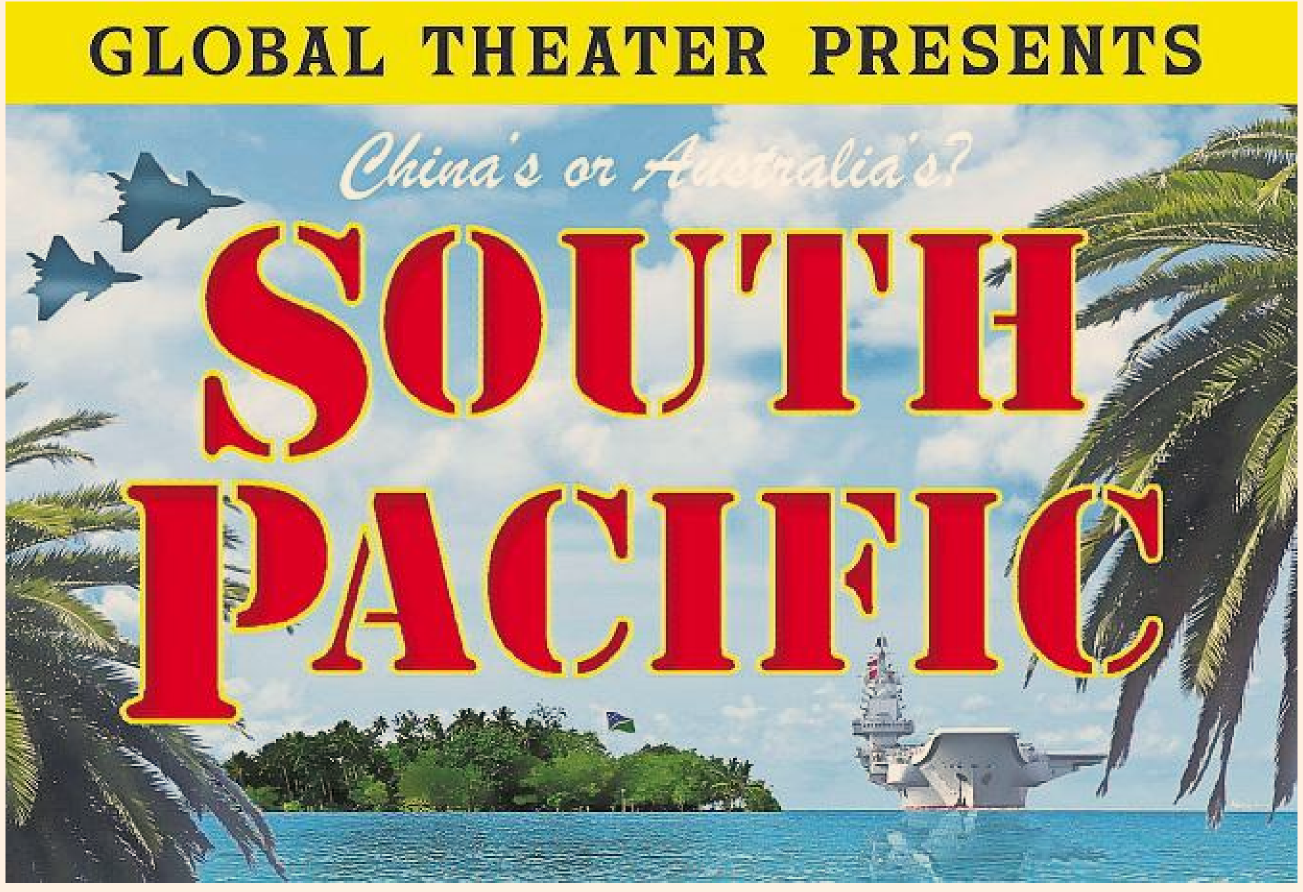
Britons' fraying health has now become a problem for the labour market, with a rising share of people too sick to work. That is a reason to pay attention, of course. But we should have been paying attention anyway. Health doesn't just matter because it has an impact on the economy; it matters because it's what people want.

The government has set an ambitious target to increase healthy life expectancy by five years by 2035. Such rapid improvements are possible: it increased by four years in the first decade of the millennium. But that was a time of sustained economic growth and higher social spending. It's hard to imagine that's what the next decade will look like, even for an optimist like me.

*sarah.o'connor@ft.com*

## Australia, China and a Solomons judgment

James Ferguson




GLOBAL AFFAIRS
Gideon Rachman

If you wanted to nominate a country in the world with zero strategic significance, the Solomon Islands might sound like a good shout. An archipelago of almost 1,000 islands in the southern Pacific with a total population of about 700,000, the Solomons seem safely distant from great power politics. The country's head of state is the British monarch, but the last visit by the sovereign was 40 years ago. China is more than 6,000km away; Australia, roughly 2,000km away.

Despite their remoteness, the Solomon Islands have become an unlikely flashpoint in the growing strategic rivalry between China and the west. The signature of a security pact between the Solomons and China in April sparked alarm in Washington and Canberra.

Kurt Campbell, a senior White House official, jumped on a plane in an unsuccessful bid to repair the damage. Penny Wong, who is Australia's foreign minister, argued that the Canberra government of the time, led by Scott Morrison, had by its negligence committed Australia's "worst foreign policy blunder in the Pacific since world war two".

Australian and American concern about the Solomons is driven by their anxiety about Chinese ambitions in the Pacific. After decades of rapid military expansion, the Chinese navy has more ships than the US fleet. Under President Xi Jinping, China has already built military bases in the South China Sea. Beijing's pact with the Solomons is mainly about domestic security. But the Americans and Australians fear that China intends to establish a naval base in the South Pacific, with the Solomons the likeliest venue.

Asked why an expanding Chinese presence in the South Pacific matters, Australian officials point to history and geography. The Solomon Islands were the scene of one of the fiercest battles of the second world war — the battle of Guadalcanal — in which more than 7,000 Americans died reclaiming the islands from Japan. A young John F Kennedy was on a US navy patrol boat that was sunk off the Solomons, and he swam ashore to one of the remoter islands.

The reason that the Americans fought Japan in the Solomons is the same reason that the islands are regarded as strategically significant today — they lie across the sea lanes between Australia, east Asia and the western US. The strategic lessons of the second world war, when Japanese planes bombed the northern port of Darwin, are seared into Australia's approach to the world.

If China were ever to follow the pattern of imperial Japan and directly challenge US military power in the Pacific, the likeliest flashpoint is Taiwan. US and Australian officials think it distinctly possible that Xi's China will attempt to invade or blockade Taiwan within the next five years. President Joe Biden has said several times that the US would come to the defence of Taiwan. In Canberra recently, as a guest of the Lowy Institute think-tank, I found a widespread assumption that, in the event of a US-China war, Australia would be drawn into the conflict. A Chinese base in the South Pacific would significantly complicate Australia's strategic calculations.

A recent meeting between Xi and Anthony Albanese, the Australian prime minister, was the first between Chinese and Australian leaders in six years. It dialled down tensions a little, as did a meeting between Xi and Biden. But the Australians and Americans still assume that China is determined to dominate the Indo-Pacific. They are equally determined to prevent that happening.

> Despite their remoteness, the islands have become an unlikely flashpoint in a growing strategic rivalry

The clearest sign of this joint determination to push back against Chinese ambitions came with the signature last year of Aukus, a security pact between Australia, the UK and the US. Its centrepiece is Australia's acquisition of nuclear-powered submarines, whose range and sophistication would greatly expand Australia's capacity to take part in wars far from its shores.

Aukus has been denounced as warmongering by both China and Russia. But the Australians argue that the pact is intended to keep the peace, by maintaining the balance of power.

Making that case to Australia's neighbours in the Indo-Pacific is tricky. President Joko Widodo of Indonesia recently told me that his country had no intention of becoming "a pawn" in a new cold war. In Canberra, Wong acknowledges that sentiment but says she believes that Australia and its neighbours "have a shared interest in a region that is non-hegemonic".

China has certain advantages in a battle for regional influence. It is the largest trading partner of most of the countries in the Indo-Pacific. And, in poor countries such as the Solomons, Chinese wealth can help achieve what is delicately referred to as "elite capture".

The Australians and Americans are now trying to bolster their own influence in the Solomons. The US has announced that it will soon open an embassy. Australia has delivered vehicles and rifles to the Solomon Islands police force, some of whose members had been sent for training in China.

But even as they grapple with modern geopolitics, the Solomons are plagued by the legacy of the second world war. Unexploded bombs litter the islands and still claim lives. If the Aukus nations are looking for projects that might win hearts and minds, they might usefully focus on clearing up the damage from the last great power conflict to sweep over the Solomon Islands.

*gideon.rachman@ft.com*

## *Europe urgently needs a new industrial master plan*

Fatih Birol

This is a pivotal moment for Europe. The global energy crisis is threatening to deal a heavy blow to large swaths of its industry and severely undermine its ability to compete on the global stage. At the same time, the region is having to grapple with the implications of the major steps other leading economies are taking in their own industrial policies.

The Inflation Reduction Act in the US is a game-changer, channelling hundreds of billions of dollars into building the energy and manufacturing industries of the future. However, the US is not alone in pursuing such mammoth efforts. China has been ahead of the curve in developing domestic manufacturing of clean energy technologies, while countries such as Japan, Korea and India are also pushing increased investment and support in that direction.

This requires the EU to reassess its own industrial strategy with the aim of positioning the region's economy for new growth in the decades ahead. The EU's Fit for 55 package and REPowerEU plan have set the path for the bloc's overall clean energy transition. But the magnitude of the actions being taken elsewhere, and the immense fallout of the energy crisis in Europe, calls for a bold new EU industrial strategy.

Natural gas prices — which have soared as a result of the Russian invasion of Ukraine — are at the heart of the current crisis and its threat to European industry. The most energy-intensive sectors are already suffering, with a growing number of companies halting and even permanently shutting down operations. Europe's major gas-consuming industries — including chemicals, food processing, steel and paper — generate economic value of more than $600bn a year and employ almost 8mn workers.

Those areas may be the most at risk, but they are only the tip of the iceberg. Exposure to high energy costs is posing broader challenges to the competitiveness of Europe's industrial sector. So far, it appears to have adapted well during this tumultuous year, thanks in part to emergency action from governments. But it needs a master plan for the future that goes beyond survival mode.

The inconvenient truth is that, for decades, the business model of many European industries was based on the availability of abundant and cheap supplies of Russian energy. That business model was shattered when Russia invaded Ukraine. And it's not coming back.

> A business model that for decades was based on cheap energy supplies from Russia has been shattered

Nor are high energy prices just a temporary phenomenon. Europe faces structurally higher fuel import prices in the absence of Russian gas. This is a clear signal that the region needs to find new sources of competitive advantage or risk deindustrialisation.

One area where it can find an edge is in the next generation of industrial production. Attention is increasingly turning to the potential of low-emissions manufacturing, which will only grow in importance as countries step up efforts to reach their climate goals and the new energy economy expands. This means increased demand for clean energy technologies — such as electric vehicles, solar panels and wind turbines — and for key materials like steel, aluminium and cement that can be produced with substantially lower emissions than they are today.

In the electricity sector, solar and wind are already the cheapest options, providing strong economic incentives that are helping to drive their deployment. But the situation is different in other sectors of the economy, such as long-distance transport and heavy industry, where more work is needed to improve the competitiveness of low-emissions options.

With offshore wind, Europe has shown that it can be a global leader in clean technologies. It now needs to become much stronger in areas such as batteries, electric vehicles, electrolysers for hydrogen, heat pumps and more. And it faces strong competitive challenges, with China, the US, Japan and many others seeking to lead the next generation of clean industrial and manufacturing technologies.

Europe has its own strengths: its large internal market, skilled workforce, broad network of research institutions and centres of expertise, and long history of producing higher value-added manufactured products. But these need to be allied with a strong push in the form of a new industrial policy from the European Commission and EU member states.

It is clear that the EU is not going to go back to where it was before the current energy crisis. It needs to be clear-eyed about this situation and bold in the actions it takes if it wants to remain a global industrial power.

*The writer is executive director of the International Energy Agency*

## *French Pornhub case shows how hard it is to regulate internet*

Julia Apostle

Within the past few days, Elon Musk has been reminded of Twitter's legal obligations in relation to online content by both the president of France, Emmanuel Macron, and by Thierry Breton, the EU commissioner for internal markets. These public interventions come in response to concerns that the platform will become some kind of free-speech hellscape.

It is widely acknowledged that dealing with harmful content is one of the toughest problems thrown up by the internet. Mistakes are common and a satisfactory, scalable solution has proved elusive. In Europe, the pendulum has moved towards a law-based model rather than self-regulation. Multiple new laws require online intermediaries to take action in relation to illegal content on their sites or face huge fines. Last month, the EU's Digital Services Act came into force. This is part of a framework of overlapping laws that include the EU copyright directive, the terrorism content regulation and many national laws such as the UK's proposed online safety bill. And there are more to come.

Both compliance with and enforcement of this regime will be difficult. Whether it will actually make the internet safer remains an open question. A dispute in France illustrates how hard it is to regulate, even when everyone agrees on the objective.

In October, a French court decided a constitutional challenge by the controversial website Pornhub may proceed against a law which allows the blocking of porn sites that fail to prevent access by children. In 2020 France amended the criminal code to specify that the use of age declaration tools ("click here if you are over 18") will not be sufficient. New legislation empowered France's online content regulator, Arcom, to seek blocking orders against websites that don't implement robust age gating.

> Given the polarised views and fundamental rights at play, the road to adopting rules will at best be long

But at present there is no age verification technology that French authorities consider effective and privacy preserving. Arcom is supposed to publish guidelines on compliant tools, but hasn't. However, it served enforcement notices last year against five free-to-view porn sites, including Pornhub, giving them 15 days to replace their age model, or risk being blocked. The sites' lawyers claim attempts to engage in discussion were ignored. The sites took no action and so blocking proceedings were initiated.

Like it or not, it is understandable that faced with the choice of adopting ineffective age verification tools that might compromise user privacy, or being blocked, Pornhub's owner MG Freesites opted to challenge the law. The court agreed that there was a question to be tried and the challenge is proceeding. And so, more than two years after the French law was toughened, a pressing social problem persists.

The European Commission recently published the draft of a new law aimed at preventing online dissemination of child sexual abuse material. The objective is also child protection. The need is urgent — reports of abuse and images depicting it have increased dramatically. Key to this draft is a detection obligation that would require adopting technology that identifies such images, and also grooming behaviour.

The project has elicited much condemnation. Critics cite the excessive surveillance of internet users. Some have questioned the existence of technical solutions able to implement the law. In contrast, children's rights organisations have welcomed the initiative.

Given the polarised views and the fundamental rights at play, the road to adopting this regulation will at best be long. If it ever gets enacted, the French dispute provides a clue to the implementation challenges ahead. Politicians are understandably using the Twitter situation to promote Europe's paradigm shift. How we make the internet safer needs more public debate. But we're still a long way from a solution.

*The writer, a lawyer at Orrick in Paris, was previously counsel for Twitter UK*

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## Vodafone/Nick Read: calling time

Nick Read may be the only person who feels any surprise at his own ousting. Investors will ask Vodafone chair Jean-François van Boxmeer why it took so long. The board's next step should be to appoint a replacement chief executive who can cut the sprawling UK-listed telecoms group down to size.

Read's parting comments noted his pride in "delivering for customers and society". He made no mention of shareholders. Over eight years, first as finance chief then as chief executive, Read has presided over a drop of £33bn in market value, more than half the starting total.

Vodafone has paid plenty of dividends. Squeezing costs to free up cash flow protected the payout but did not generate shareholder value. Any gains from slashing overheads were lost to competition in the group's biggest markets: Germany, Italy, the UK and Spain. They have suffered declining ebitda profitability since Read took over in 2018.

Italy and Spain had huge margin contractions. Spain's was 9 percentage points, a fifth below the 2018 level. In both countries, bidders showed interest. Vodafone chose not to sell.

Read's departure does not automatically signal a break-up. Chief financial officer Margherita Della Valle takes over on an interim basis. She would be the continuity candidate to take the job full-time — but continuity is the last thing Vodafone needs. It trades at half its book value, which points to the need for disposals. A sum of the parts calculation shows that the bulk of value resides in three big markets: Germany, Italy and the UK. Even using a low enterprise value to ebitda multiple of six times for Germany and five times for the others, these three could be worth €47.3bn, thinks Numis. That is half of group enterprise value today.

Selling off Spain, smaller European markets plus Egypt and Turkey might raise €17bn. Vodafone could also flog a nearly two-thirds stake in South Africa-listed Vodacom. That might realise another €10.5bn. Vodafone could halve its net debt, which is at present €45.5bn, leaving plenty for a shareholder payout.

For the first time in a quarter of a century, the shares are persistently trading at less than a pound.

Van Boxmeer needs to install an outsider chief executive who will pursue focus while dismantling a bureaucracy that is now obsolete.

## US rail industry: points of view

The US has averted a crippling national rail strike by imposing a labour agreement on rail companies and workers. The intervention has failed to address a deeper issue for the rail industry: chronic labour shortages.

Years of drastic cost cutting pleased investors but frustrated customers and workers. As if by way of recompense, two ESG investors are stepping in. Trillium Asset Management and Impact Shares have filed proposals at Union Pacific and Norfolk Southern respectively asking the groups to offer paid sick leave to eligible workers.

This would make business sense. It is true that it would cost the businesses $321mn a year to provide seven paid days of sick leave to staff, one estimate says. But that is less than 2 per cent of the $21.2bn in profits the industry generated in the first nine months of this year. And the cost should be offset by better staff retention.

Over the past six years, big freight rail companies have lost a combined 45,000 workers, according to the Surface Transportation Board. That is almost a third of their workforce.

Cost cutting has generated windfalls for rail companies and investors. BNSF and Union Pacific, two of the biggest operators in North America, reported record profits in 2021. Since 2010, US railroads have paid out $183bn (or $196bn in inflation adjusted dollars) in buybacks and dividends. Customers complain of higher prices for shoddier services and workers of exhausting schedules. Under the deal brokered by the Biden administration, rail staff will get a pay raise but not paid sick leave.

After years of cost cutting, operating margins at big rail companies have peaked. Union Pacific and Norfolk Southern's valuations reflect this. The two stocks trade on just 18 times forward earnings, compared with valuations in the mid-20s in April 2021.

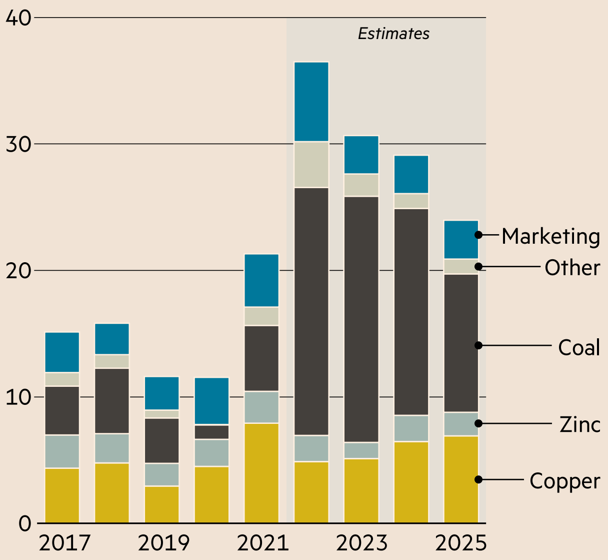
Rail companies have cut costs to the bone. They now need to provide a better service, and motivated employees are key to that. Trillium and Impact are on the right track.

## Glencore: net, King Coal

Glencore is benefiting from the rise in coal prices, which should remain buoyant. Coal acts as a substitute for natural gas in power generation, and its prices tend to track those of gas. The coal business will therefore account for a large share of Glencore's ebitda in the coming years.

**Coal provides bulk of Glencore's earnings**

Ebitda by segment ($bn)

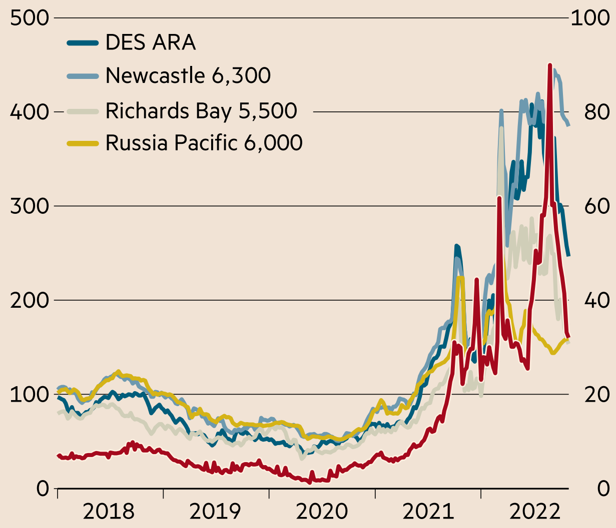



FT graphic Source: Bernstein

**Thermal coal tracks natural gas**

Price of thermal coal ($ per tonne)

European nat gas price ($/mmbtu)




Source: Bernstein

Glencore has just agreed to pay $180mn to the Democratic Republic of Congo, bringing the costs of settling corruption claims to $1.66bn.

Such moves should distance the big commodities group from its shady past. Its current embarrassment is one of polluting riches rather than dubious business practices.

Having resisted an activist investor's pressure to spin off its thermal-coal assets, the miner now benefits from their performance. But coal's success overshadows the prospects for the group's other metals; energy-transition friendly stuff such as zinc, copper and nickel. That may explain its valuation discount to big peers.

Glencore's coal seam is clear to see. First-half results at the division increased from $912mn last year to $8.9bn in 2022. Coal profits have driven a stock rally.

The bonanza should continue. Lack of investment in coal mining means prices will hold up. Bernstein estimates that coal will account for about $19.5bn of Glencore's ebitda in 2023, on a group total of $30.6bn.

That leaves Glencore looking more like a coal play, less like the trader-cum-miner promised at IPO in 2011.

Even at 2 times ebitda — the average of listed pure-plays Peabody and Whitehaven — the coal division's enterprise value alone accounts for $39bn of Glencore's total of $91bn.

Meanwhile, trading, the group's marketing division, should earn $3bn of 2023 ebitda — some 10 per cent of Glencore's total — justifying an EV of $21bn. Subtracting these two from Glencore's total EV leaves $31bn for the rest of the group's mining activities — its future-focused metals — for an implied EV/ebitda group multiple of 3.8 times.

That is about a quarter below listed peers BHP Billiton, Rio Tinto and Anglo American.

No wonder Glencore buys its own stock. The group's capital allocation strategy suggests that, absent new projects or M&A, up to $79bn of cash might be available for dividends and buybacks to 2026, on Bernstein estimates. That should keep the embers glowing on the stock price rally.

## Coinbase bonds: false prophets, elusive profits

For believers in the crypto cult, FTX's demise is a severe test of faith. To pass, you have to believe that the collapse of the digital platform has strengthened the sector. Former chief executive Sam Bankman-Fried must be dismissed as a false prophet.

But the plummeting price of bonds issued by Coinbase, a New York-listed crypto platform, suggests that this is wishful thinking. FTX's woes stemmed from dire mismanagement. Falling prices for the debt issued by Coinbase show that even a crypto business with the trappings of Wall Street respectability carries high risk.

Coinbase notes maturing in 2028 trade at just over 58 cents on the dollar, down from 94 cents a year ago. A convertible bond has hit distressed levels, trading at 55 cents on the dollar. Coinbase appeared to offer investors the chance to invest in the crypto boom rather than digital assets themselves.

But fear is infectious. The collapse of tokens such as luna and the end of FTX has hammered the entire sector.

Bitcoin's price has more than halved this year and at present sits at about $17,000. Coinbase's third-quarter results reflected the darkening outlook. The value of trading volumes fell more than 50 per cent year on year to $159bn, contributing to pre-tax losses of $545mn.

Coinbase's market worth has fallen 80 per cent to $10bn over the past year, compared with a 66 per cent dip in the Nasdaq. Its market cap is equivalent to just three times forecast 2022 sales, off from 25 times, S&P Capital data say.

Coinbase is a sturdier proposition than Bankman-Fried's fantasy-driven ventures. It lacks the same conflicts of interest. As of September 30, it held $5bn in cash and cash equivalents.

True believers see the "crypto winter" as a time of tribulation. Secular investors, notably those in Coinbase bonds, are right to be more cynical.

The securities are starting to look more like relics of a bygone era than the capital base of a new sort of stock exchange.

## Electric trucks/Tesla: think rig

Tesla's recent delivery to Pepsi could start something bigger than gossip among truckers at favoured roadside diners. The electric semi-trailer trucks could eventually eclipse electric passenger vehicles in impact.

With a claimed 500-mile range and the ability to carry up to 82,000lb, the long-haul vehicles promise to bring transformational reductions in greenhouse gases.

Trucks account for about 30 per cent of carbon emissions from transport, the International Energy Agency says. ENGS Commercial Finance estimates that initial prices for electric trucks will be twice that of low-end diesel equivalents. Companies with carbon reduction targets to meet are willing to pay. UPS and Walmart have put in orders of their own for Tesla's Semi.

Efficiency lowers costs. Tesla boss Elon Musk says the Semi's efficiency is 1.7kWh per mile. If the truck can go for 500 miles without recharging, this means the battery is at least 850kWh. It could be about 1,000kWh.

Costs will vary according to charging times. Truck owners will pay more if they want their vehicles back on the road quickly. Tesla's self-driving software could one day remove drivers, further cutting costs. Details on the Semi's price and weight have not been disclosed. Both are needed to understand its potential. A substantial charging network is also required.

Tesla was supposed to deliver the Semi in 2019. Since then, competitors have moved forward. Unilever added a Volvo EV truck to its fleet with 540 kWh of battery capacity this year.

But the competition wave is easing. Electric-truck maker Nikola suffered an inglorious fall from grace. With the blank cheque boom over, many others appear to be careening off the road. TuSimple and Embark set ambitious targets for autonomous driving tech while burning through cash. Shares are down 94-97 per cent this year.

Musk's trucks may be remembered long after his controversial takeover of Twitter has been forgotten.

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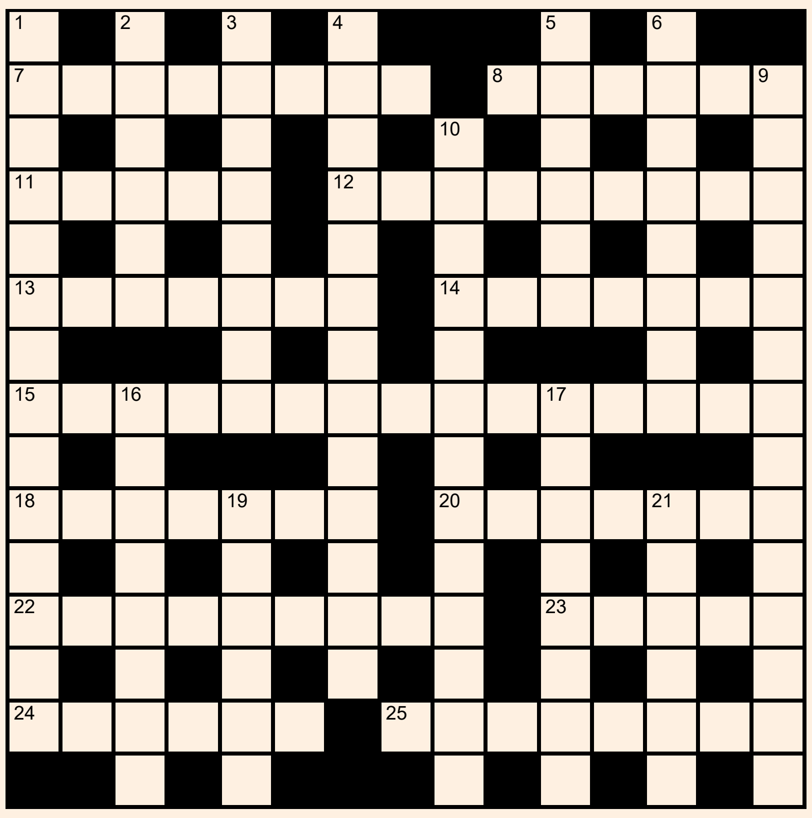
## CROSSWORD

No 17,270 Set by BUCCANEER



**ACROSS**

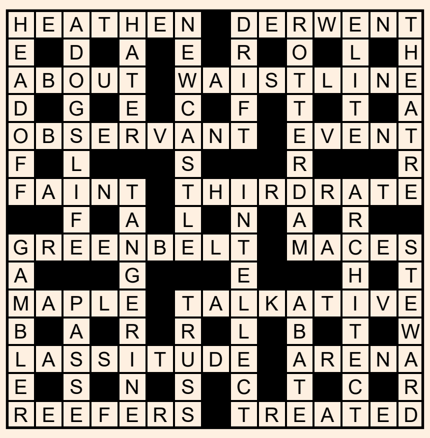
7 Brief examination finished on 1 divided by 100 (4-4)
8 Honour artist perhaps from the east (6)
11 Jewellery was delivered – a ring (5)
12 Subjects for Gauguin painter's capturing I see (9)
13 Aristocrat, one soaking up atmosphere in the capital (7)
14 Better men exposed to the elements (7)
15 Run or stagger, urged to enter old Balkan land (5-6,4)
18 People dressed for horse-riding (7)
20 Graft maintains official in clover perhaps (7)
22 Excellent tripe pie sent back in eatery (9)
23 Demonstrated what bridal wear could be made of (5)
24 Officer retreats in stratagem appropriate for horses? (6)
25 Male among a lot of geese and bats in mating times (8)

**DOWN**

1 A cold-blooded sort, criminal stole firm gold cases (3,11)
2 Cheat detective tails in a restaurant (6)
3 Masculine character keeps running round flat pitch (8)
4 Show player, team's right-winger (4,4,5)
5 Clear out base, getting disheartened on the job (4,2)
6 Italian player about to get clothing for Sampdoria star (8)
9 Policemen decree punishment, son being unruly (14)
10 On which passengers can go all the way by coaches (7,6)
16 Run through outskirts of Rome on slow vehicle (8)
17 Kit, say, with a climbing activity on mount (8)
19 PM briefly supporting bachelor's engagement (6)
21 Name dropping, mention jockeys when expected (2,4)

JOTTER PAD

Solution 17,269

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